

PRESERVATION WORKBOOK FY 86



DIVISION OF CAPITAL PLANNING & OPERATIONS

TUNNEY F. LEE DEPUTY COMMISSIONER

Prepared by Pequod Associates and Arrowstreet Inc. for use in the FY 86 budgeting process



PRESERVATION WORKBOOK

Guidance for facilities manager in preparing budget data for preservation measures as part of LONG RANGE FACILITIES DEVELOPMENT PLANS

FISCAL YEAR 1986

SEPTEMBER 10, 1984



INTRODUCTION

This workbook is designed to help a facility engineer determine the full scope of repair and maintenance projects as needed to correct deficiencies and preserve the facility. Preservation deficiencies are defined in the Division of Capital Planning and Operations' Long Range Capital Facilities Development Plan for FY86 as "...problems which if not corrected will cause damage to the property and greater expense later,...". The information the facility manager collects and organizes can then be used to strengthen in-house maintenance planning and management, as well as serve as the basis for the FY86 capital budgeting requested.

Our intent of this survey is to determine the full scope of major repairs needed to bring the buildings up to a standard from which they can be maintained through regular operating funds. Thus, the goal is to have this inventory serve as the basis of a program whereby the DCPO can plan to correct these deficiencies over the next few years.

Although the workbook presents many of these problems and may be useful in jogging your memory, it is not a checklist of all the things that could go wrong at your facility. We know you know what really needs to be done to keep your buildings going. The workbook is a way of organizing that knowledge for internal planning and transferring that knowledge all the way through the state's budgeting process.

The following material is organized by "hazards". These are general categories of deficiencies which must be addressed if the Commonwealth is to preserve the building in which the hazard exists. Hazards are defined at the beginning of their respective sections in the workbook.

Each hazard is further described by a series of conditions which are typical and occur, we think, from time to time at state facilities. As you will see, not all hazards and certainly not all the conditions cited will be found at any one facility. Furthermore, not every condition you may encounter at your facility which should be addressed to preserve a building is listed as a common deficiency. At the end of each hazard section, you have space to describe conditions at your facility that are not listed. We will be surprised if you do not have several conditions unique to your facility.

You are asked several questions about each condition and given one or more typical methods of correction as guides for describing a condition that exists, in your judgement, at your facility. The typical methods and their respective unit costs are based on average sites and straightforward installations. These are presented as a convenience; you must state the method you propose to correct the condition being described and a unit cost for getting it done. You must also describe and cost unusual construction or design limitations such as difficult access, etc., if any exist. As a check, the amount you estimated should be what you expect a responsible bid would be today to do the work.

Unit costs are intended as an estimate of total contractors cost for routine corrective action. In places where no unit costs are given, the variation in costs was too great to fix standardized prices. The suggested unit costs assume that the DCPO will administer the project, so the somewhat higher construction costs associated with this are included.

These unit costs assume the project will be done immediately and include no escalation. They include no contingencies, allowances for error or consideration of conditions which are not "routine". Any work required to demolish, gain access, refinish, rig, resupport or otherwise add to the basic correction must be described and estimated as a special, local condition and added to the cost developed using our unit costs. If you use your own units costs, you should use the same assumptions. The total of these numbers is your estimated construction cost (ECC). Calculate the total project cost by multiplying the ECC by 1.33 to incorporate all construction administration costs. Construction administration costs include the Resident Engineer, testing, advertising and printing, and the construction contingency, which increases the estimated construction costs by 1.33.

Please scan through all of the categories covered in the workbook first. This should give you a better idea of how to incorporate all of your information into this format. Use the workbook to describe and cost all the preservation deficiencies you have. Leave blank those conditions that don't apply, fill in the ones that do, and add any in the spaces provided that aren't covered adequately by the conditions listed. Send the whole workbook in with your capital budget request.

Thanks for your cooperation. We think the time you spend doing this will help us understand your needs better and help you get what you really need a little easier.

HOW TO USE THIS WORKBOOK

1. Scan the entire workbook.

Get a sense of how the workbook is organized before you fill in any of the categories.

Fill in our blanks.

Follow the directions on the next page, step by step.

Check n.a. - (not applicable) for those items which do not apply to your facility. Make sure each condition is covered only in one place. Mark a reference to where the similar condition is covered, if necessary.

Fill in your blanks.

There are blanks at the end of each section. Use these to identify conditions unique to your facility or that we have overlooked. Wherever possible, write in unit costs and quantities.

Send it in.

The entire completed workbook, along with whatever supporting information you feel is appropriate, should be returned to your agency central office. Make a copy for your records. The agency will then send a copy to the Division of Capital Planning and Operations for use in the capital budgeting procedure.

HOW TO FILL IN THE BLANKS

1. Identify a problem:

- a.) Read hazard description.
- b.) Read first condition.
- c.) Decide if applicable. If not, go to next hazard.
- d.) If applicable, describe <u>major</u> consequences in taking no corrective action.

2. Identify the corrective method:

Circle one of our corrective choices or write what has to be done.

3. Choose a unit of cost:

Where practical, basic unit costs are given. These are <u>suggested</u> only (dollars per square foot, per linear foot, etc.). Circle the unit cost you are using or write in the unit cost you are using.

4. Locate and calculate:

Indicate specifically where in your facility the problem is located. Fill in the quantity (square feet, linear feet, etc.). Multiply the unit cost by the quantity in the formula provided.

5. Identify special conditions:

Explain factors unique to your facility that will add to the construction cost. Estimate the total cost due to the special conditions.

6. Total all costs.

Add the basic and special conditions costs and write in the total as your estimated construction cost (ECC). Calculate the total project cost by multiplying the ECC by 1.33 to incorporate all construction administration costs.

SAMPLE PAGES

Preservation Workbook facility for preparation of LONG RANGE CAPITOL FACILITIES DEVELOPMENT PLAN FY	86
FIRE/EXPLOSION HAZARDS	
Any condition which, if not addressed, could	
 cause fire or explosion and result in personal injury, major reconstruction expense and/or loss of use of a facility; or, 	
 aggravate or increase the loss due to a fire or explosion by failu of required fire safety/suppression systems. 	re
TYPICAL CONDITIONS	
l. Leak in fuel or combustible liquid tank	
• What will happen in this case if work is not done?	
Correction: Typical Methods and Replace tank Suggested Unit Price	<u>K</u> _
Method proposed and locations: PEPLACE TANK	
Total quantity 10,000 GAL x unit price 1/8/GAL = 1/8/GAL	0
Cost = 4 3.20	0
Total Estimated Construction Cost (E.C.C.) = \$19.20	
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = 125,53	56
2. Leak in fuel or other combustible pipe	
What will happen in this case if work is not done?	
• Correction: Typical Methods and Replace pipe Suggested Unit Price Repair pipe NOMOGRA	14
Method proposed and locations:	
Total quantity x unit price = Local or special conditions adding to unit cost:	
Cost =	
Total Estimated Construction Cost (E.C.C.) =	
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =	

Pri	eservation Workbook facility
Ξ.	Opening in boiler, incinerator, kiln or other combustion chamber
•	What will happen in this case if work is not done?
•	Correction: Typical Methods and Replace chamber Suggested Unit Price Rebrick chamber Replace device
	Total quantity x unit price = Local or special conditions adding to unit cost:
	Cost =
€.	Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Inadequate exhaust of combustible fumes What will happen in this case if work is not done? (A5 STEPILIZE) FIMES CARCING PAIC AND EXPLOSIVE: PERSONNEL HATARD:
	MUST BE INSTALLED TO PUN CSP.
•	Correction: Typical Methods and Install exhaust system Suggested Unit Price Method proposed and locations: NCREMBE CFM (AND VELOCITY) OF EXISTING FAN FROM 200 70 800 CFM
	Total quantity 600 CFM x unit price \$ 1.80 = \$ 1080 Local or special conditions adding to unit cost: ABOVE PLASTEPPO CEILING IN CSP. NIGHT WORK
	ONLY. Cost = 4 2200
	Total Estimated Construction Cost (E.C.C.) = #3280
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = 4362

	servation Workbook reparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86
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A.	FIRE EXPLOSION HAZARDS
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COIN	
1.	Leak in fuel or combustible liquid tank
2.	Leak in fuel or other combustible pipe
3.	Faulty combustion control
4.	Faulty low water or other boiler safety device
5.	Opening in boiler, incinerator, kiln or other combustion chamber
6.	Accumulation of combustible fumes
	Overloaded circuit
	Insulation breakdown
	Poor connections/arcing
	Hot switch gear (with rated load)
	Hot transformer (with rated load)
	Failure/misapplication of circuit breaker or other current limiting device
	Inoperative emergency generator
	Inoperative sprinkler system main valve
	Inoperative sprinkler system fire pump
	Inadequate sprinkler system coverage
	Inadequate or misapplied special extinguishing system (CO, Halon, etc.)
	Inadequate smoke detectors
	Inoperative/inadequate fire alarm system
	Inadequate smoke control ventilation in buildings over four stories
	Separation of hazardous materials
	Protection of building contents
23.	Protection of occupants .
в.	THEFT & VANDALISM
Cond	ditions
	Theft or vandalism of building contents from outside
2.	Theft or vandalism of building contents from inside
	Vandalism of building exterior
4.	Vandalism by building occupants
c.	STRUCTURAL FAILURE
Cond	<u>ditions</u>
1	Cracked wood joint and beams
- •	organica mond lottic and beams

- 2. Dry, rotted wood structural members
- 3. Rusted steel members
- 4. Sagging steel members
- 5. Cracked concrete beams and columns
- 6. Spalling on concrete beams, columns and bearing walls

7.	Cracked masonry bearing walls	
8.	Bowing masonry bearing walls	
9.	Masonry bearing walls crumbling	
10.	Structural collapse of any type	
	Unrepaired fire damage	
	Building settlement	
D.	WATER PENETRATION AND DAMAGE	32
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1.	Built-up roofing and flashing leaking	
2.	Rubber membrane roofing and flashing leaking	
3.	Metal roofing and flashing leaking	
4.	Asphalt tile roofing leaking	
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6.	Damaged or missing flashings	
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8.	Leaking metal wall panels or siding	
9.	Leaking wood siding	
	Cracked or spalled precast concrete work	
	Leaking through windows	
	Leaking around doors	
	Leaking at vents and hatches	
	Leaking through basement walls	
	Leaking through basement floors	
	Site flooding	
	Erosion	
	Weakened or inadequate flood control systems	
	Sewage pipe stoppage	
	Storm drain stoppage	
	Pipe corrosion	
	Tank failure	
	Inoperative sewage pump	
	Inoperative sewage pumps	
	Inoperative samp pumps	
E.	FAILURE OF FINISH SURFACES	48
Cond	ditions	
1.	Worn out resilient floors (V.A.T., sheet vinyl, cork, linoleum, asphalt ti	le
2.	Lifting resilient floors	
3.	Damaged resilient flooring	
4.	Dusting concrete floors	
5.	·	
	Damaged carpet	

7. Wood floors worn out

5. Cooling tower 6. Air handling units

7. Pumps

8. Generators 9. Transformers

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8.	Wood floors damage
9.	Terrazzo pitted and/or cracked
10.	Ceramic tiles coming off floors and/or walls
11.	Broken ceramic tile
12.	Grout failure in ceramic tile
13.	Plaster walls and/or ceilings cracked or broken
	Water damaged plaster
15.	Drywall walls and/or ceilings cracked or broken
	Drywall damaged by water
•	Wood paneling damaged
	Vinyl wall covering delaminating
	Vinyl wall covering damaged
	Accustic wall panels damaged
	Acoustic lay-in panel ceilings damaged
	12 x 12 acoustic tile ceilings damaged
	Metal ceilings damaged
	Wood ceilings damaged
	Sprayed acoustic ceilings damaged
	Cabinetwork doors and drawers not working
	Cabinetwork and/or countertops damaged
	Damaged laboratory tops
	Repainting
F.	FREEZING
• •	·
Cond	ditions
1.	Inoperative or inadequate heat distribution devices
2.	Inoperative or inadequate heating terminal devices
3.	Inoperative or inadequate boilers or furnaces
4.	Inoperative heating controls
5.	Insufficient insulation
6.	Inoperative dry pipe sprinkler system
٠.	Inoperative dry pipe sprinkrer system
G	LIFE EXPECTANCY
G.	LIFE EAPECIANCI
Cond	ditions
<u></u>	
1.	Boilers
2.	
3.	
	Controls
	CONTRACTOR

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	Elevator inoperative
	Elevator cab damaged
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	Cable Nomograph



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FIRE EXPLOSION

Conditions

- Leak in fuel or combustible liquid tank
- Leak in fuel or other combustible pipe
- Faulty combustion control
- Faulty low water or other boiler safety device
- Opening in boiler, incinerator, kiln or other combustion chamber
- Accumulation of combustible fumes
- 7. Overloaded circuit
- 8. Insulation breakdown
- 9. Poor connections/arcing
- 10. Hot switch gear (with rated load)
- 11. Hot transformer (with rated load)
- 12. Failure/misapplication of circuit breaker or other current limiting device
- 13. Inoperative emergency generator
- 14. Inoperative sprinkler system main valve
- 15. Inoperative sprinkler system fire pump .
- 16. Inadequate sprinkler system coverage
- 17. Inadequate or misapplied special extinguishing system (CO, Halon, etc.)
- 18. Inadequate smoke detectors
- 19. Inoperative/inadequate fire alarm system
- 20. Inadequate smoke control ventilation in buildings over four stories
- 21. Separation of hazardous materials
- 22. Protection of building contents
- 23. Protection of occupants

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for preparation of	LONG RANGE	CAPITAL FACILITIES DEVELOPMENT PLAN	FY 86

FIRE/EXPLOSION HAZARDS

Any condition which, if not addressed, could

- cause fire or explosion and result in personal injury, major reconstruction expense and/or loss of use of a facility; or,
- 2) aggravate or increase the loss due to a fire or explosion by failure of required fire safety/suppression systems.

TYPICAL CONDITIONS

	Replace tank		\$1.60/Ga
sed and locations:			
	_		
cial conditions adding	g to unit cost: _		
	Suggested Unit Price sed and locations:	sed and locations:	Suggested Unit Price sed and locations:

Leak in fuel or other combustible pipe	
What will happen in this case if work is not done?	
Correction: Typical Methods and Replace pipe Suggested Unit Price Repair pipe Method proposed and locations:	See Piping Nomograph*
Total quantity x unit price Local or special conditions adding to unit cost:	
The state of the s	
Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33) =
Total Estimated Construction Cost (E.C.C.)	3 =
Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Faulty combustion control	3 =
Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.3: Faulty combustion control What will happen in this case if work is not done? Correction: Typical Methods and Replace controls Suggested Unit Price Method proposed and locations:	3 =
Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.3: Faulty combustion control What will happen in this case if work is not done? Correction: Typical Methods and Replace controls Suggested Unit Price Method proposed and locations:	\$1,300
Total Estimated Construction Cost (E.C.C. Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Faulty combustion control What will happen in this case if work is not done? Correction: Typical Methods and Replace controls Suggested Unit Price Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost:	\$1,300

^{*}See Appendix J.1.

Faulty low water or other boiler safety device	
What will happen in this case if work is not done?	
Correction: Typical Methods and Replace control Suggested Unit Price Method proposed and locations:	
Total quantity x unit price	
· · · · · · · · · · · · · · · · · · ·	
Co	ost =
Total Estimated Construction Cost (E.C.	
	,
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.	.33 =
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.	.33 =
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1. Opening in boiler, incinerator, kiln or other combustion chamb	.33 = ber
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1. Opening in boiler, incinerator, kiln or other combustion chamb	.33 = ber
Opening in boiler, incinerator, kiln or other combustion chamber What will happen in this case if work is not done? Correction: Typical Methods and Rebrick chamber Suggested Unit Price Replace chamber	\$4/MBH \$7/MBH
Opening in boiler, incinerator, kiln or other combustion chamber What will happen in this case if work is not done? Correction: Typical Methods and Rebrick chamber Suggested Unit Price Replace chamber Replace device	.33 =
Opening in boiler, incinerator, kiln or other combustion chamber What will happen in this case if work is not done? Correction: Typical Methods and Rebrick chamber Suggested Unit Price Replace chamber	\$4/MBH \$7/MBH
Opening in boiler, incinerator, kiln or other combustion chamber What will happen in this case if work is not done? Correction: Typical Methods and Rebrick chamber Suggested Unit Price Replace chamber Replace device	\$4/MBH \$7/MBH
Opening in boiler, incinerator, kiln or other combustion chamber what will happen in this case if work is not done? Correction: Typical Methods and Rebrick chamber Suggested Unit Price Replace chamber Replace device	\$4/MBH \$7/MBH \$15/MBH
Opening in boiler, incinerator, kiln or other combustion chamber What will happen in this case if work is not done? Correction: Typical Methods and Rebrick chamber Suggested Unit Price Replace chamber Replace device Method proposed and locations: Fotal quantity x unit price	\$4/MBH \$7/MBH \$15/MBH
Opening in boiler, incinerator, kiln or other combustion chamber what will happen in this case if work is not done? Correction: Typical Methods and Rebrick chamber Suggested Unit Price Replace chamber Replace device	\$4/MBH \$7/MBH \$15/MBH
Opening in boiler, incinerator, kiln or other combustion chamber what will happen in this case if work is not done? Correction: Typical Methods and Rebrick chamber Suggested Unit Price Replace chamber Replace device Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost:	\$4/MBH \$7/MBH \$15/MBH
Opening in boiler, incinerator, kiln or other combustion chamber what will happen in this case if work is not done? Correction: Typical Methods and Rebrick chamber Suggested Unit Price Replace chamber Replace device Method proposed and locations: Cotal quantity x unit price Cotal quantity x unit price Cotal or special conditions adding to unit cost:	\$4/MBH \$7/MBH \$15/MBH
Opening in boiler, incinerator, kiln or other combustion chamber what will happen in this case if work is not done? Correction: Typical Methods and Rebrick chamber Suggested Unit Price Replace chamber Replace device Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost: Correction: Typical Methods and Rebrick chamber Replace device Total Estimated Construction Cost (E.C.C.)	\$4/MBH \$7/MBH \$15/MBH
Opening in boiler, incinerator, kiln or other combustion chamber what will happen in this case if work is not done? Correction: Typical Methods and Rebrick chamber Suggested Unit Price Replace chamber Replace device Method proposed and locations: Cotal quantity x unit price Cotal quantity x unit price Cotal or special conditions adding to unit cost:	\$4/MBH \$7/MBH \$15/MBH
Opening in boiler, incinerator, kiln or other combustion chamber what will happen in this case if work is not done? Correction: Typical Methods and Rebrick chamber Suggested Unit Price Replace chamber Replace device Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost: Correction: Typical Methods and Rebrick chamber Replace device Total Estimated Construction Cost (E.C.C.)	\$4/MBH \$7/MBH \$15/MBH

Accumulation of combustib	le fumes	
What will happen in this o	case if work is not done?	
Suggested Unit	ions:	
Total quantity Local or special condition	x unit price ns adding to unit cost:	
	Coal Estimated Construction Cost (E.C.C	ost =
	ding D.C.P.O. costs): E.C.C. x 1.	
Overloaded circuit What will happen in this o		
What will happen in this o	case if work is not done?	·
	ds and Install new distributor t Price Install new transformer/ switchboard	\$3.50/Amp
What will happen in this of the correction: Typical Method	ds and Install new distributor t Price Install new transformer/ switchboard Install new substation/ service (over 400 KVA)	·
What will happen in this of the correction: Typical Method Suggested Unit	ds and Install new distributor t Price Install new transformer/ switchboard Install new substation/ service (over 400 KVA) ions:	\$3.50/Amp
What will happen in this of the correction: Typical Method Suggested Unit	ds and Install new distributor t Price Install new transformer/ switchboard Install new substation/ service (over 400 KVA) ions:	\$3.50/Amp
What will happen in this of the correction: Typical Method Suggested Unit Method proposed and location. Total quantity	ds and Install new distributor t Price Install new transformer/ switchboard Install new substation/ service (over 400 KVA) ions:	\$3.50/Amp

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Insulation breakdown	
What will happen in this case if work is not done?	
Correction: Typical Methods and Replace cable Suggested Unit Price	Nomograph
Method proposed and locations:	_
Total quantity x unit price Local or special conditions adding to unit cost:	_ =
Local or special conditions adding to unit cost:	_
Co	st =
Total Estimated Construction Cost (E.C.C	
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.	
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1. Poor connections/arcing	
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1. Poor connections/arcing	
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1. Poor connections/arcing What will happen in this case if work is not done?	
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1. Poor connections/arcing What will happen in this case if work is not done? Correction: Typical Methods and Replace 100 terminals Suggested Unit Price Repair 100 terminals	33 =
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1. Poor connections/arcing What will happen in this case if work is not done? Correction: Typical Methods and Replace 100 terminals Suggested Unit Price Repair 100 terminals	\$.23/Amp
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1. Poor connections/arcing What will happen in this case if work is not done? Correction: Typical Methods and Replace 100 terminals Suggested Unit Price Repair 100 terminals	\$.23/Amp
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1. Poor connections/arcing What will happen in this case if work is not done? Correction: Typical Methods and Replace 100 terminals Suggested Unit Price Repair 100 terminals Method proposed and locations:	\$.23/Amp \$.15/Amp
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1. Poor connections/arcing What will happen in this case if work is not done? Correction: Typical Methods and Replace 100 terminals Suggested Unit Price Repair 100 terminals Method proposed and locations: Total quantity x unit price	\$.23/Amp \$.15/Amp
Poor connections/arcing What will happen in this case if work is not done? Correction: Typical Methods and Replace 100 terminals Suggested Unit Price Repair 100 terminals Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost:	\$.23/Amp \$.15/Amp
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1. Poor connections/arcing What will happen in this case if work is not done? Correction: Typical Methods and Replace 100 terminals Suggested Unit Price Repair 100 terminals Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost:	\$.23/Amp \$.15/Amp

facility.....

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^{*}See Appendix J.2.

Hot switch gear (with rated load)	
What will happen in this case if work is not done?	
Correction: Typical Methods and Replace switch gear Suggested Unit Price Method proposed and locations:	
Total quantity x unit price Local or special conditions adding to unit cost:	
	Cost =
Total Estimated Construction Cost (E. Total Project Cost (including D.C.P.O. costs): E.C.C. >	
Total Project Cost (including D.C.P.O. costs): E.C.C.	
Total Project Cost (including D.C.P.O. costs): E.C.C.	
Total Project Cost (including D.C.P.O. costs): E.C.C. > Hot transformer (with rated load)	
Total Project Cost (including D.C.P.O. costs): E.C.C. > Hot transformer (with rated load)	
Hot transformer (with rated load) What will happen in this case if work is not done? Correction: Typical Methods and Replace transformer Suggested Unit Price	1.33 =
Hot transformer (with rated load) What will happen in this case if work is not done? Correction: Typical Methods and Replace transformer Suggested Unit Price Method proposed and locations:	1.33 =
Hot transformer (with rated load) What will happen in this case if work is not done? Correction: Typical Methods and Replace transformer Suggested Unit Price	1.33 =
Hot transformer (with rated load) What will happen in this case if work is not done? Correction: Typical Methods and Replace transformer Suggested Unit Price Method proposed and locations:	1.33 =
Total Project Cost (including D.C.P.O. costs): E.C.C. > Hot transformer (with rated load) What will happen in this case if work is not done? Correction: Typical Methods and Replace transformer Suggested Unit Price Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost:	. \$40.00/KV
Hot transformer (with rated load) What will happen in this case if work is not done? Correction: Typical Methods and Replace transformer Suggested Unit Price Method proposed and locations:	. \$40.00/KV
Total Project Cost (including D.C.P.O. costs): E.C.C. > Hot transformer (with rated load) What will happen in this case if work is not done? Correction: Typical Methods and Replace transformer Suggested Unit Price Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost: Total Estimated Construction Cost (E.	. \$40.00/KV

preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT P	
Failure/misapplication of circuit breaker or other current limit: What will happen in this case if work is not done?	
Correction: Typical Methods and Replace circuit breaker Suggested Unit Price Method proposed and locations:	\$1.70/Amp
Total quantity x unit price Local or special conditions adding to unit cost:	=
Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	
Inoperative emergency generator What will happen in this case if work is not done?	
	\$450/KW \$150/KW
Method proposed and locations:	
Total quantity x unit price Local or special conditions adding to unit cost:	=
Cost	
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	

noperative sprinkler system main valve	
hat will happen in this case if work is not done?	
orrection: Typical Methods and Replace 4" main valve	
Suggested Unit Price Replace 6" main valve	\$2,300
ethod proposed and locations:	_
otal quantity x unit price ocal or special conditions adding to unit cost:	
Total of opening country to unite toot.	
	Cost =
Total Estimated Construction Cost (E.C	
	c.c.) =
Total Estimated Construction Cost (E.Cotal Project Cost (including D.C.P.O. costs): E.C.C. x	c.c.) =
	c.c.) =
otal Project Cost (including D.C.P.O. costs): E.C.C. x	c.c.) =
	c.c.) =
noperative sprinkler system fire pump	c.c.) =
noperative sprinkler system fire pump hat will happen in this case if work is not done? orrection: Typical Methods and Replace pump	c.c.) =
noperative sprinkler system fire pump hat will happen in this case if work is not done? orrection: Typical Methods and Replace pump Suggested Unit Price Replace motor	\$40/GPM \$40/HP
noperative sprinkler system fire pump that will happen in this case if work is not done? orrection: Typical Methods and Replace pump Suggested Unit Price Replace motor Overhaul pump	c.c.) =
noperative sprinkler system fire pump that will happen in this case if work is not done? Description: Typical Methods and Replace pump Suggested Unit Price Replace motor Overhaul pump	\$40/GPM \$40/HP
noperative sprinkler system fire pump hat will happen in this case if work is not done? orrection: Typical Methods and Replace pump Suggested Unit Price Replace motor Overhaul pump ethod proposed and locations:	\$40/GPM \$40/HP
noperative sprinkler system fire pump that will happen in this case if work is not done? orrection: Typical Methods and Replace pump Suggested Unit Price Replace motor Overhaul pump	\$40/GPM \$40/HP
noperative sprinkler system fire pump hat will happen in this case if work is not done? perrection: Typical Methods and Replace pump Suggested Unit Price Replace motor Overhaul pump ethod proposed and locations: Ottol quantity	\$40/GPM \$40/HP \$13/GPM
noperative sprinkler system fire pump nat will happen in this case if work is not done? Direction: Typical Methods and Replace pump Suggested Unit Price Replace motor Overhaul pump ethod proposed and locations: Dotal quantity x unit price Docal or special conditions adding to unit cost:	S40/GPM \$40/HP \$13/GPM
noperative sprinkler system fire pump hat will happen in this case if work is not done? orrection: Typical Methods and Replace pump Suggested Unit Price Replace motor Overhaul pump ethod proposed and locations: otal quantity	S40/GPM \$40/HP \$13/GPM \$13/GPM Cost =

Pre for p	servation Workbook facility preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PI	
18.	Inadequate smoke detectors What will happen in this case if work is not done?	
•	Correction: Typical Methods and Install new detectors Suggested Unit Price Method proposed and locations:	\$.70/s.f.
	Total quantity x unit price Local or special conditions adding to unit cost: Cost Total Estimated Construction Cost (E.C.C.)	
19.	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Inoperative/inadequate firm alarm system	
•	What will happen in this case if work is not done? Correction: Typical Methods and Redesign existing system	\$.70/s.f.
	Suggested Unit Price Install new system Method proposed and locations:	\$1.65/s.f.
	Total quantity x unit price Local or special conditions adding to unit cost: Cost	
	Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	

	preparation of LONG RÄNGE CAPITAL FACILITIES DEVELOPMENT P	
20.	Inadequate smoke control ventilation in buildings over four stori	Les
•	What will happen in this case if work is not done?	
•	Correction: Typical Methods and Install new ventilation Suggested Unit Price system Method proposed and locations:	\$2.30/CFM
	Total quantity x unit price Local or special conditions adding to unit cost:	=
		=
	Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	
21.	Separation of hazardous materials	
•	What will happen in this case if work is not done?	
•	Correction: Method proposed and locations:	
	Total quantity x unit price Local or special conditions adding to unit cost:	=
	Cost	
	Total Estimated Construction Cost (E.C.C.)	
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	=

	servation Workbook facility facility	
22.	Protection of building contents What will happen in this case if work is not done?	
•	Correction: Typical Methods and Suggested Unit Price Method proposed and locations:	
	Total quantity x unit price = Local or special conditions adding to unit cost: Cost =	
	Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =	
23.	Protection of occupants What will happen in this case if work is not done?	
•	Correction: Method proposed and locations:	
	Total quantity x unit price = Local or special conditions adding to unit cost: Cost =	
	Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =	

Preservation Workbook facility for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPME	NT PLAN	FY 86
(#) (Cther Conditions)		
What will happen in this case if work is not done?		
• Correction: Method proposed and locations:		
Total quantity x unit price Local or special conditions adding to unit cost:		
	Cost =	
Total Estimated Construction Cost (E.C		
Total Project Cost (including D.C.P.O. costs): E.C.C. x	1.33 =	
(#) (Other Conditions)		
• What will happen in this case if work is not done?		
• Correction: Method proposed and locations:		
Total quantity x unit price Local or special conditions adding to unit cost:		
	Cost =	
Total Estimated Construction Cost (E.C) =	

for preparation of

THEFT & VANDALISM

Conditions

- Theft or vandalism of building contents from outside
- Theft or vandalism of building contents from inside
- 3. Vandalism of building exterior
- 4. Vandalism by building occupants

E

Preservation	Workbook	facility	••••
for preparation of	LONG RANGE	CAPITAL FACILITIES DEVELOPMENT PLAN FY	

HAZARD: THEFT AND VANDALISM

Any condition which, if not addressed, will allow entry for the purpose of theft or allow vandalism to occur, leading to loss of contents, danger to the security of occupants, or to property. Indications of such conditions are where such incidents have already occurred or where protective devices no longer operate.

TYPICAL CONDITIONS

			444
Correction:	Typical Methods and		\$60 each
	Suggested Unit Price		\$25 each
		Security fencing	\$15/1.f.
		Burglar alarms	\$1.30/s.
		Block up windows	\$12/s.f.
		Night lighting '	\$85/fixt
Method prop	oosed and locations:	Surveillance systems	
Method prop	osed and locations:		\$210/fix
		Surveillance systems	\$210/fix
Total quant		Surveillance systems unit price	\$210/fix

<u>T</u>	heft of building contents from in	nside	
WI	That will happen in this case if w	work is not done?	
C	Correction: Typical Methods and Suggested Unit Price	Door locks Lockers Cabinet locks	\$60 each \$140 each \$20 each
Me	ethod proposed and locations:	Burglar alarms	\$1.30/s.3
		unit price	=
	ocal or special conditions adding	to unit cost:	
		Costated Construction Cost (E.C.C. P.O. costs): E.C.C. x 1.3) =
T	Total Estima otal Project Cost (including D.C.	ated Construction Cost (E.C.C.) =
		ated Construction Cost (E.C.C.) =
V	otal Project Cost (including D.C.	ated Construction Cost (E.C.C. P.O. costs): E.C.C. x 1.3) =
WI CO	Cotal Project Cost (including D.C. Vandalism of building exterior What will happen in this case if we correction: Typical Methods and Suggested Unit Price	work is not done? Night lighting Fencing New exterior surface finish	\$85/fixtu \$15/1.f.
V: WI — — — — — — — — — — — — — — — — — —	Cotal Project Cost (including D.C. Candalism of building exterior That will happen in this case if we correction: Typical Methods and Suggested Unit Price Method proposed and locations:	Ated Construction Cost (E.C.C. A.P.O. costs): E.C.C. x 1.3 Work is not done? Night lighting Fencing New exterior surface finish unit price	\$85/fixts \$15/1.f.
	Cotal Project Cost (including D.C. Candalism of building exterior Chat will happen in this case if we correction: Typical Methods and Suggested Unit Price Sethod proposed and locations: Cotal quantity X	Night lighting Fencing New exterior surface finish unit price y to unit cost:	\$85/fixts \$15/1.f.
	Cotal Project Cost (including D.C. Candalism of building exterior Chat will happen in this case if we correction: Typical Methods and Suggested Unit Price Method proposed and locations: Cotal quantity	Night lighting Fencing New exterior surface finish unit price y to unit cost:	\$85/fixtu \$15/1.f. \$0.85/s.:

	servation Workbook facilityreparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLA	
4.	Vandalism by building occupants What will happen in this case if work is not done?	
•	Correction: Typical Methods and Suggested Unit Price (Flooring, walls, ceilings) Method proposed and locations:	\$3/s.f.
	Total quantity x unit price Local or special conditions adding to unit cost:	=
	Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	=
(#)	. (Other Conditions) What will happen in this case if work is not done?	
•	Correction: Method proposed and locations:	
	Total quantity x unit price Local or special conditions adding to unit cost:	=
	Cost	=

Preservation Workbook facility for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT F	LAN FY 86
(#) (Other Conditions)	
• What will happen in this case if work is not done?	
• Correction: Method proposed and locations:	
Total quantity x unit price Local or special conditions adding to unit cost:	•
Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	=
<pre>(#) (Other Conditions) • What will happen in this case if work is not done?</pre>	
• Correction: Method proposed and locations:	
Total quantity x unit price Local or special conditions adding to unit cost:	
Total Estimated Construction Cost (E.C.C.)	=
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	-

Pre for p	servation Workbook facility facility
(#)	. (Other Conditions)
•	What will happen in this case if work is not done?
•	Correction: Method proposed and locations:
	Total quantity x unit price = Local or special conditions adding to unit cost:
	Cost =
	Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =
(#)	. (Other Conditions)
•	What will happen in this case if work is not done?
•	Correction: Method proposed and locations:
	Total quantity x unit price = Local or special conditions adding to unit cost:
	Cost =
	Total Estimated Construction Cost (E.C.C.) =
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =

STRUCTURAL FAILURE

Conditions

- 1. Cracked wood joint and beams
- 2. Dry, rotted wood structural members
- 3. Rusted steel members
- 4. Sagging steel members
- 5. Cracked concrete beams and columns
- 6. Spalling on concrete beams, columns and bearing walls
- 7. Cracked masonry bearing walls
- 8. Bowing masonry bearing walls
- 9. Masonry bearings walls crumbling
- 10. Structural collapse of any type
- 11. Unrepaired fire damage
- 12. Building settlement

	rvation Workbook paration of LONG RANGE CAPITA	facilityL FACILITIES DEVELOPMENT PL	
		•	
	win 1 + 72 + 9 1 m m		
	TURAL FAILURE		
	ondition which, if not addressed, ing element and cause further dama ity.		
TYPICA	AL CONDITIONS		
1. <u>W</u>	ood joist or beam cracked		
• WI	nat will happen in this case if wo	rk is not done?	
_			
• C	Suggested Unit Price	Shoring (price per l.f. of structural member)	\$6/1.f.
		Replacement (price per s.f. of floor zone)	\$12/s.f.
24.		Structural survey	
Me	ethod proposed and locations:		
-			
	otal quantity x u ocal or special conditions adding	nit price to unit cost:	
-		Cost	=
	Total Estimat	ed Construction Cost (E.C.C.)	
To	otal Project Cost (including D.C.P	.O. costs): E.C.C. x 1.33	=

Masonry bearing walls bowing	
What will happen in this case if work is not done?	
Correction: Typical Methods and Structural survey Suggested Unit Price Shoring Replacement	\$16/1.f. \$24/1.f.
Method proposed and locations:	
Total quantity y unit price	
Total quantity x unit price Local or special conditions adding to unit cost:	
	Cost =
Total Estimated Construction Cost	Cost =(E.C.C.) =
Total Estimated Construction Cost Total Project Cost (including D.C.P.O. costs): E.C.C.	(E.C.C.) =
	(E.C.C.) =
Total Project Cost (including D.C.P.O. costs): E.C.C.	(E.C.C.) =
Total Project Cost (including D.C.P.O. costs): E.C.C.	(E.C.C.) =
Total Project Cost (including D.C.P.O. costs): E.C.C.	(E.C.C.) =
Total Project Cost (including D.C.P.O. costs): E.C.C. Masonry bearing walls crumbling	(E.C.C.) =
Masonry bearing walls crumbling What will happen in this case if work is not done?	(E.C.C.) =
Masonry bearing walls crumbling What will happen in this case if work is not done? Correction: Typical Methods and Patch and rebuild Suggested Unit Price Structural survey	(E.C.C.) =
Masonry bearing walls crumbling What will happen in this case if work is not done? Correction: Typical Methods and Patch and rebuild Suggested Unit Price Structural survey Replacement	(E.C.C.) =
Masonry bearing walls crumbling What will happen in this case if work is not done? Correction: Typical Methods and Patch and rebuild Suggested Unit Price Structural survey	(E.C.C.) =
Masonry bearing walls crumbling What will happen in this case if work is not done? Correction: Typical Methods and Patch and rebuild Suggested Unit Price Structural survey Replacement	(E.C.C.) =
Masonry bearing walls crumbling What will happen in this case if work is not done? Correction: Typical Methods and Patch and rebuild Suggested Unit Price Structural survey Replacement Method proposed and locations:	(E.C.C.) =
Masonry bearing walls crumbling What will happen in this case if work is not done? Correction: Typical Methods and Patch and rebuild Suggested Unit Price Structural survey Replacement Method proposed and locations: Total quantity	(E.C.C.) =
Masonry bearing walls crumbling What will happen in this case if work is not done? Correction: Typical Methods and Patch and rebuild Suggested Unit Price Structural survey Replacement Method proposed and locations:	(E.C.C.) =
Masonry bearing walls crumbling What will happen in this case if work is not done? Correction: Typical Methods and Patch and rebuild Suggested Unit Price Structural survey Replacement Method proposed and locations: Total quantity	(E.C.C.) =
Masonry bearing walls crumbling What will happen in this case if work is not done? Correction: Typical Methods and Patch and rebuild Suggested Unit Price Structural survey Replacement Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost:	(E.C.C.) = (x 1.33 = \$15/s.f. \$24/s.f.
Masonry bearing walls crumbling What will happen in this case if work is not done? Correction: Typical Methods and Patch and rebuild Suggested Unit Price Structural survey Replacement Method proposed and locations: Total quantity	(E.C.C.) =

Pre for p	preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT	PLAN FY 86
10.	Structural collapse of any type What will happen in this case if work is not done?	
• "	Correction: Typical Methods and Structural survey Suggested Unit Price Rebuild Method proposed and locations:	\$1,500/1.f.
	Total quantity x unit price Local or special conditions adding to unit cost:	
	Total Estimated Construction Cost (E.C.C Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.	
11.	Fire damaged structure What will happen in this case if work is not done?	
•	Correction: Typical Methods and Structural survey Suggested Unit Price Shoring (price per s.f. of building) Reinforcement (price per 1.f. or each)	\$6/s.f. \$500
	Replacement Method proposed and locations:	\$1,500/1.f.
	Total quantity x unit price Local or special conditions adding to unit cost:	_ _
	Total Estimated Construction Cost (E.C.C Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.	

Building settlement What will happen in this case if work is not done? Correction: Typical Methods and Structural survey Suggested Unit Price Method proposed and locations: Total quantity		FY
Correction: Typical Methods and Structural survey Suggested Unit Price Method proposed and locations: Total quantity x unit price = Local or special conditions adding to unit cost: Cost = Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Correction: (Other Conditions) What will happen in this case if work is not done? Correction: Method proposed and locations:	ettlement	
Correction: Typical Methods and Structural survey Suggested Unit Price Method proposed and locations: Total quantity x unit price = Local or special conditions adding to unit cost: Cost = Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Correction: (Other Conditions) What will happen in this case if work is not done? Correction: Method proposed and locations:	happen in this case if work is not done?	
Suggested Unit Price Method proposed and locations: Total quantity		
Method proposed and locations: Total quantity x unit price = Local or special conditions adding to unit cost:		
Cost =		
Cost =		
Cost = Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = . (Other Conditions) What will happen in this case if work is not done? Correction: Method proposed and locations:	tity x unit price =	
Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = . (Other Conditions) What will happen in this case if work is not done? Correction: Method proposed and locations:	pecial conditions adding to unit cost:	
Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = . (Other Conditions) What will happen in this case if work is not done? Correction: Method proposed and locations:	Cost =	
. (Other Conditions) What will happen in this case if work is not done? Correction: Method proposed and locations:		
. (Other Conditions) What will happen in this case if work is not done? Correction: Method proposed and locations:	ect Cost (including D.C.P.O. costs): E.C.C. x 1.33 =	
What will happen in this case if work is not done? Correction: Method proposed and locations:		
What will happen in this case if work is not done? Correction: Method proposed and locations:		
Correction: Method proposed and locations:		
Method proposed and locations:	Conditions)	
Method proposed and locations:		
Total quantity x unit price =	happen in this case if work is not done?	
Total quantity x unit price =	happen in this case if work is not done?	
	happen in this case if work is not done?	
	happen in this case if work is not done? posed and locations: x unit price =	
Cost =	happen in this case if work is not done? posed and locations:	
Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =	happen in this case if work is not done? posed and locations: tity x unit price = pecial conditions adding to unit cost: Cost =	

-	reparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY
	. (Other Conditions)
	What will happen in this case if work is not done?
	Correction: Method proposed and locations:
•	
	Total quantity x unit price = Local or special conditions adding to unit cost:
•	Cost =
	Total Estimated Construction Cost (E.C.C.) =
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =
	. (Other Conditions)
1	What will happen in this case if work is not done?
	Correction: Method proposed and locations:
•	
	Total quantity x unit price = Local or special conditions adding to unit cost:
•	
	Cost =

•)_	. (Other Conditions)	
	What will happen in this case if work is not done?	
	Correction: Method proposed and locations:	
	Total quantity x unit price = Local or special conditions adding to unit cost:	
	Total Estimated Construction Cost (E.C.C.) =	
	Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =	
	Total Estimated Construction Cost (E.C.C.) =	
	Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =	
	Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = . (Other Conditions)	
	Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = . (Other Conditions) What will happen in this case if work is not done? Correction:	

WATER PENETRATION AND DAMAGE

Conditions

- 1. Built-up roofing and flashing leaking
- 2. Rubber membrane roofing and flashing leaking
- 3. Metal roofing and flashing leaking
- 4. Asphalt tile roofing leaking
- 5. Slate or tile roofing leaking
- 6. Damaged or missing flashings
- 7. Damaged or missing gutters and downspouts
- 8. Leaking metal wall panels or siding
- 9. Leaking wood siding
- 10. Cracked or spalled precast concrete work
- 11. Leaking through windows
- 12. Leaking around doors
- 13. Leaking at vents and hatches
- 14. Leaking through basement walls
- 15. Leaking through basement floors
- 16. Site flooding
- 17. Erosion
- 18. Weakened or inadequate flood control systems
- 19. Sewage pipe stoppage
- 20. Storm drain stoppage
- 21. Pipe corrosion
- 22. Tank failure
- 23. Inoperative sewage pump
- 24. Inoperative sump pumps

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for preparation of LONG RANGE		FY	

WATER PENETRATION AND DAMAGE

Any condition which, if not addressed, will cause personal injury due to catastrophic flooding, water damage to contents, structure deterioration, loss of building systems, major repair expenses and/or loss of use of building.

TYPICAL CONDITIONS

	ypical Methods and	Repair	\$4/s.f.
S	Suggested Unit Price	_	\$5/s.f.
		Replacement with different	
		material	\$5/s.f.
			42/2.1.
Method propos	ed and locations:		43/3.1.
Method propose	ed and locations:		<u> </u>
Method propose	ed and locations:		
Method propos	ed and locations:		<u> </u>
•			
. Fotal quantity	yx	unit price	
. Fotal quantity		unit price	
. Fotal quantity	У x	unit price	

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Preservation Workbook

Asphalt shingle roofing leak		
What will happen in this case if w	work is not done?	
Correction: Typical Methods and		63 50/- 6
Suggested Unit Price	building) Replacement (price per s.f.	\$1.50/s.f.
	of building)	\$3.50/s.f.
	Replacement with different material (price per s.f.	
	of building)	\$.2.50/s.
Method proposed and locations:		
Total quantityx	unit price	=
Local or special conditions adding	g to unit cost:	
		• .
	Cost	=
Total Estima	Cost ated Construction Cost (E.C.C.)	
	ated Construction Cost (E.C.C.)	-
	ated Construction Cost (E.C.C.)	-
	ated Construction Cost (E.C.C.)	-
Total Project Cost (including D.C.	ated Construction Cost (E.C.C.)	-
Total Project Cost (including D.C.	ated Construction Cost (E.C.C.)	-
Total Project Cost (including D.C.	ated Construction Cost (E.C.C.) .P.O. costs): E.C.C. x 1.33	-
Total Project Cost (including D.C.	ated Construction Cost (E.C.C.) .P.O. costs): E.C.C. x 1.33	-
Total Project Cost (including D.C. Slate or tile roofing leak What will happen in this case if w	ated Construction Cost (E.C.C.) P.O. costs): E.C.C. x 1.33 work is not done?	
Total Project Cost (including D.C. Slate or tile roofing leak What will happen in this case if w Correction: Typical Methods and	ated Construction Cost (E.C.C.) P.O. costs): E.C.C. x 1.33 work is not done?	\$12/s.f.
Total Project Cost (including D.C. Slate or tile roofing leak What will happen in this case if w	ated Construction Cost (E.C.C.) P.O. costs): E.C.C. x 1.33 work is not done?	
Slate or tile roofing leak What will happen in this case if w Correction: Typical Methods and Suggested Unit Price	Repair Replacement Replacement with different material	\$12/s.f. \$14/s.f.
Slate or tile roofing leak What will happen in this case if w Correction: Typical Methods and Suggested Unit Price	Repair Replacement Replacement with different	\$12/s.f. \$14/s.f.
Slate or tile roofing leak What will happen in this case if w Correction: Typical Methods and Suggested Unit Price	Repair Replacement Replacement with different material	\$12/s.f. \$14/s.f.
Slate or tile roofing leak What will happen in this case if w Correction: Typical Methods and Suggested Unit Price	Repair Replacement Replacement with different material	\$12/s.f. \$14/s.f.
Slate or tile roofing leak What will happen in this case if w Correction: Typical Methods and Suggested Unit Price Method proposed and locations:	Repair Replacement Replacement with different material	\$12/s.f. \$14/s.f.
Total Project Cost (including D.C. Slate or tile roofing leak What will happen in this case if w Correction: Typical Methods and Suggested Unit Price Method proposed and locations: Total quantity x	Repair Replacement Replacement with different material unit price	\$12/s.f. \$14/s.f.
Total Project Cost (including D.C. Slate or tile roofing leak What will happen in this case if w Correction: Typical Methods and Suggested Unit Price Method proposed and locations: Total quantity x	Repair Replacement Replacement with different material unit price	\$12/s.f.
Slate or tile roofing leak What will happen in this case if w Correction: Typical Methods and Suggested Unit Price Method proposed and locations: Total quantity x	Repair Replacement Replacement with different material unit price	\$12/s.f. \$14/s.f. \$6.50/s.f.
Slate or tile roofing leak What will happen in this case if w Correction: Typical Methods and Suggested Unit Price Method proposed and locations: Total quantity x Local or special conditions adding	Repair Replacement Replacement with different material unit price g to unit cost:	\$12/s.f. \$14/s.f. \$6.50/s.f.
Slate or tile roofing leak What will happen in this case if w Correction: Typical Methods and Suggested Unit Price Method proposed and locations: Total quantity x Local or special conditions adding	Repair Replacement Replacement with different material unit price g to unit cost: Cost ated Construction Cost (E.C.C.)	\$12/s.f. \$14/s.f. \$6.50/s.f.

Metal wall panels	or siding leaking	<u>ng</u>	
What will happen :	in this case if w	work is not done?	
Sugges	sted Unit Price	Repair (\$1,000 min.) Replacement Replacement with different material	\$15/s.f. \$15/s.f. \$10/s.f.
Method proposed an	d locations:		_
			-
Total quantity	X	unit price	
		to unit cost:	
	Motol Pating		
Total Project Cost		ted Construction Cost (E.C.C. P.O. costs): E.C.C. x 1.3) =
	: (including D.C.	ted Construction Cost (E.C.C.) =
Wood siding leaking	: (including D.C.	ted Construction Cost (E.C.C.) =
Wood siding leaking	: (including D.C.	ated Construction Cost (E.C.C. P.O. costs): E.C.C. x 1.3) =
Wood siding leaking what will happen is	equincluding D.C.	Ated Construction Cost (E.C.C. AP.O. costs): E.C.C. x 1.3 Work is not done?) =
Wood siding leaking what will happen in the correction: Typical	equincluding D.C.	Repair (\$1,000 Min.) Replacement) =
Wood siding leaking what will happen in the correction: Typical Suggest	e (including D.C.	Repair (\$1,000 Min.)) =
Wood siding leaking what will happen in the correction: Typical	e (including D.C.	Repair (\$1,000 Min.) Replacement Replacement with different	\$2/s.f. \$6/s.f.
Wood siding leaking what will happen in the correction: Typical Suggest	e (including D.C.	Repair (\$1,000 Min.) Replacement Replacement with different material	\$2/s.f. \$6/s.f.
Wood siding leaking what will happen in the correction: Typical Suggest	e (including D.C.	Repair (\$1,000 Min.) Replacement Replacement with different material	\$2/s.f. \$6/s.f.
Nood siding leaking what will happen in the correction: Typical Suggest the control of the correction	in this case if we have all Methods and sted Unit Price and locations:	Repair (\$1,000 Min.) Replacement Replacement with different material	\$2/s.f. \$6/s.f. \$3/s.f.
Nood siding leaking what will happen in the correction: Typical Suggest the control of the correction	in this case if we have all Methods and sted Unit Price and locations:	Repair (\$1,000 Min.) Replacement Replacement with different material	\$2/s.f. \$6/s.f. \$3/s.f.
Nood siding leaking what will happen in the correction: Typical Suggest the control of the correction	in this case if we have all Methods and sted Unit Price and locations:	Repair (\$1,000 Min.) Replacement Replacement with different material unit price to unit cost:	\$2/s.f. \$6/s.f. \$3/s.f.

	servation Workbook preparation of LONG RANGE CAPIT			
10.	Precast concrete work cracked or s What will happen in this case if w			
•	Correction: Typical Methods and Suggested Unit Price Method proposed and locations:		ifferent	\$8/s.f. \$5,000 min. \$20/s.f.
	Total quantity x	unit price		=
	Local or special conditions adding	ated Construction Cos	Cost	
11.	Window leaking What will happen in this case if w		C.C. x 1.33	=
•	Correction: Typical Methods and Suggested Unit Price	Seal Replace Add storm windows	\$1/1.f. o \$12/s.f. \$3/s.f. o	
	Method proposed and locations:	Weatherstrip	\$1.50/s.f	or \$100 ea.
	Total quantity x Local or special conditions adding			=
	Total Project Cost (including D.C.	ated Construction Cos. P.O. costs): E.O.	st (E.C.C.)	

or p	servation Workbook facility preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLA	
L2.	Doors leaking	
•	What will happen in this case if work is not done?	
	Correction: Typical Methods and Repair Suggested Unit Price Replace Weatherstrip Method proposed and locations:	\$100/dcor \$550 each \$100/dcor
	Total quantity x unit price Local or special conditions adding to unit cost:	=
	Cost Total Estimated Construction Cost (E.C.C.)	
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	
3.	Vents and hatches leaking What will happen in this case if work is not done?	
	Correction: Typical Methods and Repair Suggested Unit Price Replace Seal	\$500 each \$2,000 each \$100 each
	Method proposed and locations:	
	Total quantity x unit price Local or special conditions adding to unit cost:	=
	Total quantity x unit price Local or special conditions adding to unit cost: Cost	
	Total quantity x unit price Local or special conditions adding to unit cost:	=

Basement walls leaking	
What will happen in this case if work is not done?	
Correction: Typical Methods and Grout cracks and holes Suggested Unit Price Exterior waterproofing Interior waterproofing	\$20/1.f. \$8/s.f. \$20/s.f.
Method proposed and locations:	
	-
Total quantity x unit price Local or special conditions adding to unit cost:	=
	=
Total Estimated Construction Cost (E.C.C.)	
Total Estimated Constitution Cost (E.C.C.)	=
	-
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	-
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	-
	-
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	-
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Basement floors leaking	-
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Basement floors leaking What will happen in this case if work is not done? Correction: Typical Methods and Grout cracks and holes	\$20/1.f.
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Basement floors leaking What will happen in this case if work is not done? Correction: Typical Methods and Grout cracks and holes Suggested Unit Price Interior waterproofing	3 =
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Basement floors leaking What will happen in this case if work is not done? Correction: Typical Methods and Grout cracks and holes	\$20/1.f.
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Basement floors leaking What will happen in this case if work is not done? Correction: Typical Methods and Grout cracks and holes Suggested Unit Price Interior waterproofing	\$20/1.f.
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Basement floors leaking What will happen in this case if work is not done? Correction: Typical Methods and Grout cracks and holes Suggested Unit Price Interior waterproofing Method proposed and locations: Total quantity x unit price	\$20/1.f. \$20/s.f.
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Basement floors leaking What will happen in this case if work is not done? Correction: Typical Methods and Grout cracks and holes Suggested Unit Price Interior waterproofing	\$20/1.f. \$20/s.f.
Basement floors leaking What will happen in this case if work is not done? Correction: Typical Methods and Grout cracks and holes Suggested Unit Price Interior waterproofing Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost:	\$20/1.f. \$20/s.f.
Basement floors leaking What will happen in this case if work is not done? Correction: Typical Methods and Grout cracks and holes Suggested Unit Price Interior waterproofing Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost:	\$20/1.f. \$20/s.f.

or p	reparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86
	Site flooding What will happen in this case if work is not done?
	Correction: Typical Methods and Repair drainage systems Suggested Unit Price New drainage systems Regrading Method proposed and locations:
	Total quantity x unit price =
7.	Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Erosion
	What will happen in this case if work is not done?
	Correction: Typical Methods and Correction of drainage Suggested Unit Price Planting \$5/s.f. Paving \$3/s.f.
	Total quantity x unit price = Local or special conditions adding to unit cost:

	servation Workbook facility preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PL	
20.	Storm drain stoppage What will happen in this case if work is not done?	·
•	Correction: Typical Methods and Replace 14" pipe Suggested Unit Price Replace 20" pipe Augur system Method proposed and locations:	\$27/ft. \$35/ft. \$12/ft.
	Total quantity x unit price Local or special conditions adding to unit cost: Cost	
	Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	
21.	Pipe Corrosion What will happen in this case if work is not done?	
•	Correction: Typical Methods and Replace pipe Suggested Unit Price Method proposed and locations:	See Piping Nomograph*
	Total quantity x unit price Local or special conditions adding to unit cost:	-
	Cost	=
	Total Estimated Construction Cost (E.C.C.)	=
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	

^{*} See Appendix J.1.

p		
2.	Tank failure	
	What will happen in this case if work is not done?	
	Correction: Typical Methods and Suggested Unit Price Replace tank Method proposed and locations:	\$1.60/Gallo
	Total quantity x unit price Local or special conditions adding to unit cost:	=
	Cost	=
	Total Estimated Construction Cost (E.C.C.)	
	Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	
		=
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Inoperative sewage pump What will happen in this case if work is not done?	=
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Inoperative sewage pump What will happen in this case if work is not done? Correction: Typical Methods and Replace pump Suggested Unit Price	=
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Inoperative sewage pump What will happen in this case if work is not done? Correction: Typical Methods and Replace pump Suggested Unit Price Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost:	\$35/GPM
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Inoperative sewage pump What will happen in this case if work is not done? Correction: Typical Methods and Replace pump Suggested Unit Price Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost:	\$35/GPM
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Inoperative sewage pump What will happen in this case if work is not done? Correction: Typical Methods and Replace pump Suggested Unit Price Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost: Cost	\$35/GPM
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Inoperative sewage pump What will happen in this case if work is not done? Correction: Typical Methods and Replace pump Suggested Unit Price Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost: Cost Total Estimated Construction Cost (E.C.C.)	\$35/GPM
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Inoperative sewage pump What will happen in this case if work is not done? Correction: Typical Methods and Replace pump Suggested Unit Price Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost: Cost Total Estimated Construction Cost (E.C.C.)	\$35/GPM

Inoperative sump pumps	
what will happen in this case if work is not done?	
Correction: Typical Methods and Replace pump Suggested Unit Price Method proposed and locations:	\$28/GPM
	- -
Fotal quantity x unit price	- =
Fotal quantity x unit price Local or special conditions adding to unit cost:	_
	_
	t =
Total Estimated Construction Cost (E.C.C.	
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.3	3 =
. (Other Conditions)	
• (Other Conditions) What will happen in this case if work is not done?	
What will happen in this case if work is not done?	
What will happen in this case if work is not done?	
What will happen in this case if work is not done? Correction: Method proposed and locations:	
What will happen in this case if work is not done?	

Preservation Workbook facility for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT F	
(#) (Other Conditions)	
• What will happen in this case if work is not done?	
• Correction: Method proposed and locations:	
Total quantity x unit price Local or special conditions adding to unit cost:	•
Cost	
Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	
(#) (Other Conditions)	
• What will happen in this case if work is not done?	
• Correction: Method proposed and locations:	
Total quantity x unit price Local or special conditions adding to unit cost:	=
Cost	=
Total Estimated Construction Cost (E.C.C.)	
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	=

	servation Workbook facilityfacility	
(#)	. (Cther Conditions)	
•	What will happen in this case if work is not done?	
•	Correction: Method proposed and locations:	
	Total quantity x unit price	_
	Total quantity x unit price Local or special conditions adding to unit cost:	***************************************
	Cost	=
	Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	
(#)	. (Other Conditions)	
•	What will happen in this case if work is not done?	
•	Correction: Method proposed and locations:	
	Total quantity x unit price Local or special conditions adding to unit cost:	=
	Cost	=
	Total Estimated Construction Cost (E.C.C.)	=
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	=

for preparation of

FAILURE OF FINISH SURFACES

Conditions

- Worn out resilient floors (V.A.T., sheetvinyl, cork, linoleum, asphalt tile)
- 2. Lifting resilient floors
- 3. Damaged resilient flooring
- 4. Dusting concrete floors
- 5. Carpet worn out
- 6. Damaged carpet
- 7. Wood floors worn out
- 8. Wood floors damage
- 9. Terrazzo pitted and/or cracked
- 10. Ceramic tiles coming off floors and/or walls
- 11. Broken ceramic tile
- 12. Grout failure in ceramic tile
- 13. Plaster walls and/or ceilings cracked or broken
- 14. Water damaged plaster
- 15. Drywall walls and/or ceilings cracked or broken
- 16. Drywall damaged by water
- 17. Wood paneling damaged
- 18. Vinyl wall covering delaminating
- 19. Vinyl wall covering damaged
- 20. Acoustic wall panels damaged
- 21. Acoustic lay-in panel ceilings damaged
- 22. 12 x 12 acoustic tile ceilings damaged
- 23. Metal ceilings damaged
- 24. Wood ceilings damaged
- 25. Sprayed acoustic ceilings damaged
- 26. Cabinetwork doors and drawers not working
- 27. Cabinetwork and/or countertops damaged
- 28. Damaged laboratory tops
- 29. Repainting

E

Preservation '	Workbook	facility	 •••••
for preparation of	LONG RANGE	CAPITAL FACILITIES DEVELOPMENT PLAN	86

FAILURE OF FINISH SURFACES

Any condition which, if not addressed, will allow further deterioration which will require more costly repairs or appears sufficiently unsightly to cause harm to the normal functioning of the facility. Such conditions should be beyond the scope of normal maintenance procedures.

TYPICAL CONDITIONS

			
Correction: Typic	cal Methods and	Replacement	\$3/s.f.
Sugge	ested Unit Price		
		materials	\$2/s.f.
ethod proposed a	and locations:		
			
		unit price	2
ocal or special	conditions adding	to unit cost:	

Concrete floor dusting	
What will happen in this case if work is not done?	
Correction: Typical Methods and Apply sealer/hardener	
Suggested Unit Price (\$1,000 min.) Method proposed and locations:	\$0.50/s.f
Total quantity x unit price	= /
Local or special conditions adding to unit cost:	
	Cost =
Total Estimated Construction Cost (E.C.	.C.) =
	1.33 =
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1	1.33 =
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1	1.33 =
Cotal Project Cost (including D.C.P.O. costs): E.C.C. x Costs	1.33 =
Carpet Worn What will happen in this case if work is not done?	
Correction: Typical Methods and Repair (\$1,000 min.) Suggested Unit Price Replacement	\$30/s.y. \$20/s.y.
Correction: Typical Methods and Repair (\$1,000 min.)	\$30/s.y.
Correction: Typical Methods and Repair (\$1,000 min.) Suggested Unit Price Replacement with other	\$30/s.y. \$20/s.y.
Carpet Worn What will happen in this case if work is not done? Correction: Typical Methods and Repair (\$1,000 min.) Suggested Unit Price Replacement Replacement with other materials	\$30/s.y. \$20/s.y.
Carpet Worn What will happen in this case if work is not done? Correction: Typical Methods and Repair (\$1,000 min.) Suggested Unit Price Replacement Replacement with other materials	\$30/s.y. \$20/s.y.
Carpet Worn What will happen in this case if work is not done? Correction: Typical Methods and Repair (\$1,000 min.) Suggested Unit Price Replacement Replacement with other materials Method proposed and locations:	\$30/s.y. \$20/s.y. \$2/s.f.
Carpet Worn What will happen in this case if work is not done? Correction: Typical Methods and Repair (\$1,000 min.) Suggested Unit Price Replacement Replacement with other materials	\$30/s.y. \$20/s.y. \$2/s.f.
Carpet Worn What will happen in this case if work is not done? Correction: Typical Methods and Repair (\$1,000 min.) Suggested Unit Price Replacement Replacement with other materials Method proposed and locations: Cotal quantity	\$30/s.y. \$20/s.y. \$2/s.f.
Carpet Worn What will happen in this case if work is not done? Correction: Typical Methods and Repair (\$1,000 min.) Suggested Unit Price Replacement Replacement with other materials Method proposed and locations: Cotal quantity	\$30/s.y. \$20/s.y. \$2/s.f.
Carpet Worn What will happen in this case if work is not done? Correction: Typical Methods and Repair (\$1,000 min.) Suggested Unit Price Replacement Replacement with other materials Method proposed and locations: Cotal quantity	\$30/s.y. \$20/s.y. \$2/s.f. = Cost =

Carpe	et damaged			
••••••••••••••••••••••••••••••••••••••	will happen in this ca	se if w	ork is not done?	
orre	ection: Typical Methods	and	Correct source of damage	\$30/s.y.
	Suggested Unit	Price	Repair Replacement	\$20/s.y.
			Replacement with other	
			material	\$2/s.f.
Metho	od proposed and location	ns:		
			unit price	
rota	l quantity	adding	to unit cost:	
	1 01 000141 001141 00114		-	
				Cost =
	Moto 1	. Fetime		
			ated Construction Cost (E.C.	c.) =
Tota				c.) =
Tota			ated Construction Cost (E.C.	c.) =
	l Project Cost (includi		ated Construction Cost (E.C.	c.) =
			ated Construction Cost (E.C.	c.) =
Wood	l Project Cost (includi	ing D.C.	ated Construction Cost (E.C. P.O. costs): E.C.C. x 1	c.) =
Wood	l Project Cost (includi	ing D.C.	ated Construction Cost (E.C. P.O. costs): E.C.C. x 1	c.) =
Wood	l Project Cost (includi	ing D.C.	ated Construction Cost (E.C. P.O. costs): E.C.C. x 1	c.) =
Wood What	floors worn will happen in this ca	ase if w	work is not done? Refinishing (\$1,000 min.)	C.) =
Wood What Corr	floors worn will happen in this ca	ase if was and Price	work is not done? Refinishing (\$1,000 min.)	C.) =
Wood What Corr	floors worn will happen in this ca	ase if was and Price	work is not done? Refinishing (\$1,000 min.)	C.) =
Wood What	floors worn will happen in this ca	ase if was and Price	work is not done? Refinishing (\$1,000 min.)	C.) =
Wood What	floors worn will happen in this ca	ase if was and Price	work is not done? Refinishing (\$1,000 min.)	C.) =
Wood What Corr	floors worn will happen in this care ection: Typical Methods Suggested Unit od proposed and location	ase if was and Price ons:	work is not done? Refinishing (\$1,000 min.) Replacement	C.) =
Wood What Corr	floors worn will happen in this ca	ase if was and Price ons:	work is not done? Refinishing (\$1,000 min.) Replacement	C.) =
Wood What Corr	floors worn will happen in this care ection: Typical Methods Suggested Unit od proposed and location	ase if was and Price ons:	work is not done? Refinishing (\$1,000 min.) Replacement	C.) =
Wood What Corr	floors worn will happen in this care ection: Typical Methods Suggested Unit od proposed and location	ase if was and Price ons:	Refinishing (\$1,000 min.) Replacement unit price g to unit cost:	C.) =
Wood What Corr	floors worn will happen in this ca ection: Typical Methods Suggested Unit od proposed and location l quantity l or special conditions	ase if was and Price ons:	Refinishing (\$1,000 min.) Replacement unit price g to unit cost:	\$2/s.f. \$5/s.f. \$5/s.f.
Wood What Corr Meth	floors worn will happen in this can ection: Typical Methods Suggested Unit od proposed and location l quantity l or special conditions	ase if was and Price ons:	Refinishing (\$1,000 min.) Replacement unit price g to unit cost:	<pre>\$2/s.f. \$5/s.f. \$5/s.f. \$5/s.f. </pre>
Wood What Corr Meth	floors worn will happen in this can ection: Typical Methods Suggested Unit od proposed and location l quantity l or special conditions	ase if was and Price ons:	Refinishing (\$1,000 min.) Replacement unit price g to unit cost:	<pre>\$2/s.f. \$5/s.f. \$5/s.f. \$5/s.f. </pre>
Wood What Corr Meth	floors worn will happen in this can ection: Typical Methods Suggested Unit od proposed and location l quantity l or special conditions	ase if was and Price ons:	Refinishing (\$1,000 min.) Replacement unit price g to unit cost:	<pre>\$2/s.f. \$5/s.f. \$5/s.f. \$5/s.f. </pre>

Nood floors damaged	
That will happen in this case if work is not done?	
Correction: Typical Methods and Correct source of damage Suggested Unit Price Refinishing	\$3.50/s.
Replacement sethod proposed and locations:	\$5/s.f.
Cotal quantity x unit price cocal or special conditions adding to unit cost:	_ =
	ost =
Total Estimated Construction Cost (E.C.	c.) =
Total Estimated Construction Cost (E.C. Cotal Project Cost (including D.C.P.O. costs): E.C.C. x 1	
otal Project Cost (including D.C.P.O. costs): E.C.C. x 1	
Cotal Project Cost (including D.C.P.O. costs): E.C.C. x 1	.33 =
errazzo pitted or cracked That will happen in this case if work is not done?	.33 =
Cotal Project Cost (including D.C.P.O. costs): E.C.C. x 1	.) \$6/s.f. \$11/s.f.
Cotal Project Cost (including D.C.P.O. costs): E.C.C. x 1 Errazzo pitted or cracked That will happen in this case if work is not done? Correction: Typical Methods and Patch and repair (\$500 min Suggested Unit Price Replace	.) \$6/s.f. \$11/s.f.
Cotal Project Cost (including D.C.P.O. costs): E.C.C. x 1 Errazzo pitted or cracked What will happen in this case if work is not done? Correction: Typical Methods and Patch and repair (\$500 min Suggested Unit Price Replace Method proposed and locations:	.) \$6/s.f. \$11/s.f.
Cotal Project Cost (including D.C.P.O. costs): E.C.C. x 1 Errazzo pitted or cracked That will happen in this case if work is not done? Correction: Typical Methods and Patch and repair (\$500 min Suggested Unit Price Replace	.) \$6/s.f. \$11/s.f.
Cotal Project Cost (including D.C.P.O. costs): E.C.C. x 1 Errazzo pitted or cracked That will happen in this case if work is not done? Forrection: Typical Methods and Patch and repair (\$500 min Suggested Unit Price Replace lethod proposed and locations: Total quantity x unit price cotal quantity x unit price cotal or special conditions adding to unit cost:	.) \$6/s.f. \$11/s.f.
Cotal Project Cost (including D.C.P.O. costs): E.C.C. x 1 Exercision: Typical Methods and Patch and repair (\$500 min Suggested Unit Price Replace Method proposed and locations: Cotal quantity x unit price cotal or special conditions adding to unit cost:	.) \$6/s.f. \$11/s.f.

Drywall damaged by water	
What will happen in this case if work is not done?	
Correction: Typical Methods and Correct cause Suggested Unit Price Patch Replace	\$1.50/s.f \$2.50/s.f
Method proposed and locations:	
Total quantity x unit price	=
Local or special conditions adding to unit cost:	
	Cost =
Total Estimated Construction Cost Total Project Cost (including D.C.P.O. costs): E.C.C	(E.C.C.) =
Total Project Cost (including D.C.P.O. costs): E.C.C	(E.C.C.) =
Total Project Cost (including D.C.P.O. costs): E.C.C	(E.C.C.) = . x 1.33 =
Total Project Cost (including D.C.P.O. costs): E.C.C Wood paneling damaged What will happen in this case if work is not done?	(E.C.C.) =
Total Project Cost (including D.C.P.O. costs): E.C.C Wood paneling damaged What will happen in this case if work is not done? Correction: Typical Methods and Repair Suggested Unit Price Replace	(E.C.C.) =
Total Project Cost (including D.C.P.O. costs): E.C.C Wood paneling damaged What will happen in this case if work is not done? Correction: Typical Methods and Repair	\$2/s.f. \$3/s.f. \$2.50/s.f.
Wood paneling damaged What will happen in this case if work is not done? Correction: Typical Methods and Repair Suggested Unit Price Replace Replace with other man	\$2/s.f. \$3/s.f. \$2.50/s.f.
Wood paneling damaged What will happen in this case if work is not done? Correction: Typical Methods and Repair Suggested Unit Price Replace Replace with other man	\$2/s.f. \$3/s.f. \$2.50/s.f
Wood paneling damaged What will happen in this case if work is not done? Correction: Typical Methods and Repair Suggested Unit Price Replace Replace with other manethod proposed and locations: Total quantity x unit price	\$2/s.f. \$3/s.f. \$2.50/s.f

•	Vinyl wall covering delaminated	
	What will happen in this case if work is not done?	
	• • • • • • • • • • • • • • • • • • • •	\$1.75/s.f
	Replace with other material Method proposed and locations:	\$0.75/s.I
	Total quantity x unit price Local or special conditions adding to unit cost:	=
	Cost	=
	Total Estimated Construction Cost (E.C.C.)	
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	=
•	Vinyl wall covering damaged	
	What will happen in this case if work is not done?	
	Correction: Typical Methods and Repair Suggested Unit Price Replace Replace with other material	
		\$1.75/s.f
	Suggested Unit Price Replace Replace with other material Method proposed and locations:	\$1.75/s.f
	Suggested Unit Price Replace Replace with other material	\$1.75/s.f
	Suggested Unit Price Replace Replace with other material Method proposed and locations:	\$1.75/s.f \$0.75/s.f
	Suggested Unit Price Replace Replace with other material Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost: Cost Total Estimated Construction Cost (E.C.C.)	\$1.75/s.f \$0.75/s.f
	Suggested Unit Price Replace Replace with other material Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost: Cost	\$1.75/s.f \$0.75/s.f

•	Acoustic wall panels damaged	
	What will happen in this case if work is not done?	
	Correction: Typical Methods and Repair (\$500 min.) Suggested Unit Price Replace Method proposed and locations:	\$6/s.f. \$9/s.f.
	Total quantity x unit price Local or special conditions adding to unit cost:	=
	Cost	=
	Total Estimated Construction Cost (E.C.C.)	=
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	=
	Acoustic lay-in panel ceilings damaged What will happen in this case if work is not done?	
	Correction: Typical Methods and Correct cause of damage Suggested Unit Price Repair Replace	\$2/s.f.
	Correction: Typical Methods and Correct cause of damage Suggested Unit Price Repair	\$2/s.f.
	Correction: Typical Methods and Correct cause of damage Suggested Unit Price Repair Replace Replace with other materials Method proposed and locations:	\$2/s.f.
	Correction: Typical Methods and Correct cause of damage Suggested Unit Price Repair Replace Replace with other materials	\$2/s.f.
	Correction: Typical Methods and Correct cause of damage Suggested Unit Price Repair Replace Replace with other materials Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost:	\$1.50/s.f.
	Correction: Typical Methods and Correct cause of damage Suggested Unit Price Repair Replace Replace with other materials Method proposed and locations: Total quantity x unit price	\$2/s.f. \$1.50/s.f.

Profor	preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT	PLAN FY 86
24.	Wood ceilings damaged . What will happen in this case if work is not done?	
•	Correction: Typical Methods and Correct cause of damage Suggested Unit Price Repair Replace Replace with other material Method proposed and locations:	\$4/s.f. \$8/s.f. \$1.50/s.f.
	Total quantity x unit price Local or special conditions adding to unit cost: Cost Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	
25.	Sprayed acoustic ceilings damaged What will happen in this case if work is not done?	
•	Correction: Typical Methods and Correct cause of damage Suggested Unit Price Repair (\$1,000 min.) Replace Replace with other material Method proposed and locations:	\$5/s.f. \$4/s.f. \$1.50/s.f.
	Total quantity x unit price Local or special conditions adding to unit cost: Cost	
	Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	-

Wood ceil	ings damaged		
what will	happen in this case if	work is not done?	
Correction	n: Typical Methods and	Correct cause of damage	
	Suggested Unit Price	Repair Replace	\$4/s.f. \$8/s.f.
		Replace with other material	\$1.50/s.f
Method pro	oposed and locations:		-
			-
Total quar	ntity x	unit price	-
_		g to unit cost:	-
			-
		Cos	t =
	Total Estima	ated Construction Cost (E.C.C.) =
Cotal Pro		ated Construction Cost (E.C.C. P.O. costs): E.C.C. x 1.3	
Total Pro			
	ject Cost (including D.C.	.P.O. costs): E.C.C. x 1.3	
Sprayed a	ject Cost (including D.C.	.P.O. costs): E.C.C. x 1.3	
Sprayed a	ject Cost (including D.C.	.P.O. costs): E.C.C. x 1.3	
Sprayed a	ject Cost (including D.C.	P.O. costs): E.C.C. x 1.3 work is not done?	
Sprayed a	ject Cost (including D.C.	P.O. costs): E.C.C. x 1.3 work is not done? Correct cause of damage	3 =
Sprayed a	ject Cost (including D.C.	P.O. costs): E.C.C. x 1.3 Work is not done? Correct cause of damage Repair (\$1,000 min.) Replace	\$5/s.f. \$4/s.f.
Sprayed and will Correction	coustic ceilings damaged happen in this case if the cousting of the cousting cousting the cousting of the cous	P.O. costs): E.C.C. x 1.3 work is not done? Correct cause of damage Repair (\$1,000 min.) Replace Replace with other material	\$5/s.f. \$4/s.f.
Sprayed and will Correction	ject Cost (including D.C.	P.O. costs): E.C.C. x 1.3 Work is not done? Correct cause of damage Repair (\$1,000 min.) Replace	\$5/s.f. \$4/s.f.
Sprayed and will Correction	coustic ceilings damaged happen in this case if the cousting of the cousting country in the case if the cousting of the cousti	P.O. costs): E.C.C. x 1.3 work is not done? Correct cause of damage Repair (\$1,000 min.) Replace Replace with other material	\$5/s.f. \$4/s.f.
Sprayed and what will correction dethod pro	coustic ceilings damaged happen in this case if we have a suggested Unit Price oposed and locations:	P.O. costs): E.C.C. x 1.3 Work is not done? Correct cause of damage Repair (\$1,000 min.) Replace Replace with other material	\$5/s.f. \$4/s.f.
Sprayed action of the correction of the correcti	coustic ceilings damaged happen in this case if we have a suggested Unit Price oposed and locations:	P.O. costs): E.C.C. x 1.3 work is not done? Correct cause of damage Repair (\$1,000 min.) Replace Replace with other material unit price	\$5/s.f. \$4/s.f.
Sprayed action of the correction of the correcti	coustic ceilings damaged happen in this case if the state of the state	P.O. costs): E.C.C. x 1.3 Work is not done? Correct cause of damage Repair (\$1,000 min.) Replace Replace with other material unit price g to unit cost:	\$5/s.f. \$4/s.f. \$1.50/s.f
Sprayed action of the correction of the correcti	coustic ceilings damaged happen in this case if we have a suggested Unit Price posed and locations: http://www.special.conditions.addings.com/	P.O. costs): E.C.C. x 1.3 work is not done? Correct cause of damage Repair (\$1,000 min.) Replace Replace with other material unit price	\$5/s.f. \$4/s.f. \$1.50/s.f

6.	Cabinetwork doors and drawers not working	
	What will happen in this case if work is not done?	
	Correction: Typical Methods and Repair (\$1,000 min.) Suggested Unit Price Replace Method proposed and locations:	\$10/1.f. \$150/1.f.
	Total quantity x unit price Local or special conditions adding to unit cost:	=
	Cost	=
	Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	
7.	Cabinetwork or countertop damaged What will happen in this case if work is not done?	
7.		\$10/1.f. \$30/1.f.
7.	What will happen in this case if work is not done? Correction: Typical Methods and Correct cause of damage Suggested Unit Price Repair Replace	
7.	What will happen in this case if work is not done? Correction: Typical Methods and Correct cause of damage Suggested Unit Price Repair Replace	
7.	What will happen in this case if work is not done? Correction: Typical Methods and Correct cause of damage Suggested Unit Price Repair Replace Method proposed and locations: Total quantity x unit price	\$30/1.f.
7.	What will happen in this case if work is not done? Correction: Typical Methods and Correct cause of damage Suggested Unit Price Repair Replace Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost:	\$30/1.f.

Laboratory tops damaged	
What will happen in this case if work is not done?	
Commention: Mariani Notheda and Depoir (CEOO min)	¢20/a 6
Suggested Unit Price Replace (\$1,000 min.)	\$20/s.f. \$40/s.f.
Method proposed and locations:	-
	-
	-
Total quantity x unit price	- =
Local or special conditions adding to unit cost:	
	-
Cos	t =
Total Estimated Construction Cost (E.C.C.) =
Total Estimated Construction Cost (E.C.C.	
Total Estimated Construction Cost (E.C.C. Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.3 Repainting	3 =
Total Estimated Construction Cost (E.C.C. Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.3 Repainting	3 =
Total Estimated Construction Cost (E.C.C. Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.3	3 =
Total Estimated Construction Cost (E.C.C. Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.3 Repainting	3 =
Total Estimated Construction Cost (E.C.C. Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.3 Repainting What will happen in this case if work is not done? Correction: Typical Methods and Interior Suggested Unit Price Exterior	3 =
Total Estimated Construction Cost (E.C.C. Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.3 Repainting What will happen in this case if work is not done? Correction: Typical Methods and Interior	\$0.60/s.f
Total Estimated Construction Cost (E.C.C. Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.3 Repainting What will happen in this case if work is not done? Correction: Typical Methods and Interior Suggested Unit Price Exterior	\$0.60/s.f
Total Estimated Construction Cost (E.C.C. Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.3 Repainting What will happen in this case if work is not done? Correction: Typical Methods and Interior Suggested Unit Price Exterior Method proposed and locations:	\$0.60/s.f
Total Estimated Construction Cost (E.C.C. Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.3 Repainting What will happen in this case if work is not done? Correction: Typical Methods and Interior Suggested Unit Price Exterior Method proposed and locations:	\$0.60/s.f
Total Estimated Construction Cost (E.C.C. Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.3 Repainting What will happen in this case if work is not done? Correction: Typical Methods and Interior Suggested Unit Price Exterior Method proposed and locations:	\$0.60/s.f
Total Estimated Construction Cost (E.C.C. Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.3 Repainting What will happen in this case if work is not done? Correction: Typical Methods and Interior Suggested Unit Price Exterior Method proposed and locations: Total quantity	\$0.60/s.f
Total Estimated Construction Cost (E.C.C. Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.3 Repainting What will happen in this case if work is not done? Correction: Typical Methods and Interior Suggested Unit Price Exterior Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost: Cos	\$0.60/s.f \$0.80/s.f
Total Estimated Construction Cost (E.C.C. Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.3 Repainting What will happen in this case if work is not done? Correction: Typical Methods and Interior Suggested Unit Price Exterior Method proposed and locations: Fotal quantity x unit price Local or special conditions adding to unit cost: Cos Cos Total Estimated Construction Cost (E.C.C.	\$0.60/s.f \$0.80/s.f
Total Estimated Construction Cost (E.C.C. Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.3 Repainting What will happen in this case if work is not done? Correction: Typical Methods and Interior Suggested Unit Price Exterior Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost: Cos	\$0.60/s.f \$0.80/s.f

	servation Workbook facility facility facility facility
(#)	. (Other Conditions)
•	What will happen in this case if work is not done?
•	Correction: Method proposed and locations:
	Total quantity x unit price = Local or special conditions adding to unit cost:
	Cost =
	Total Estimated Construction Cost (E.C.C.) =
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =
(#)	. (Other Conditions)
•	What will happen in this case if work is not done?
•	Correction: Method proposed and locations:
	Total quantity x unit price = Local or special conditions adding to unit cost:
	Cost =
	Total Estimated Construction Cost (E.C.C.) =
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =

FREEZING

Conditions

- 1. Inoperative or inadequate heat distribution devices
- 2. Inoperative or inadequate heating terminal devices
- 3. Inoperative or inadequate boilers or furnaces
- 4. Inoperative heating controls
- 5. Insufficient insulation
- 6. Inoperative dry pipe sprinkler system

Preservation W	orkbook		facility	 	•••••	••••
for preparation of	LONG RANGE	CAPITAL				86

FREEZING

Any condition, which if not addressed, will cause expansion, bursting, deterioration or other building system damage due to freezing requiring major repair expense and/or loss of use of building.

TYPICAL CONDITIONS

	Typical Methods and Suggested Unit Price sed and locations:	Install new piping	See Pip: Nomogra
Fotal quanti	tyx		=

^{*}See Appendix J.1.

reparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PL	
Inoperative or inadequate heat terminal devices What will happen in this case if work is not done?	
Correction: Typical Methods and Install new device Suggested Unit Price Method proposed and locations:	\$70/MBH
Total quantity x unit price Local or special conditions adding to unit cost:	=
Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	-
What will happen in this case if work is not done?	
Correction: Typical Methods and Install additional Suggested Unit Price boiler capacity	315/MBH
Hethod proposed and locations:	
Total quantity x unit price Local or special conditions adding to unit cost:	
Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	=

Inoperative heating controls	
What will become in this case if work is not done?	
What will happen in this case if work is not done?	
Correction: Typical Methods and Install new controls	Unique
Suggested Unit Price Method proposed and locations:	
	`
	•
Total quantity x unit price Local or special conditions adding to unit cost:	=
Cost	=
Total Estimated Construction Cost (E.C.C.)	=
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	=
Insufficient insulation	
What will happen in this case if work is not done?	
	*
Correction: Typical Methods and Install new insulation	\$2.70/s.f.
Suggested Unit Price	
Method proposed and locations:	
Total quantity x unit price	=
Total quantity x unit price Local or special conditions adding to unit cost:	
Cost	=
Total Estimated Construction Cost (E.C.C.)	=

	reparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PL	
•	Inoperative dry pipe sprinkler system What will happen in this case if work is not done?	
	Correction: Typical Methods and Replace 4" dry pipe Suggested Unit Price valve components Method proposed and locations:	\$1,800
	Total quantity x unit price Local or special conditions adding to unit cost:	· =
	Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	=
	. (Cther Conditions)	
	What will happen in this case if work is not done?	
	Correction:	
	Method proposed and locations:	
	Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost:	=

. (Other Conditions)	
What will happen in this case if work is not done?	
Correction:	
Method proposed and locations:	
	•
Total quantity x unit price Local or special conditions adding to unit cost:	
Local or special conditions adding to unit cost:	
Cost	
Total Estimated Construction Cost (E.C.C.)	
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	
. (Other Conditions)	
That will happen in this case if work is not done?	
Correction:	
Method proposed and locations:	-
	-
	D
Total quantity x unit price Local or special conditions adding to unit cost:	-
ocal of special conditions adding to unit cost.	-
Cost	=
Total Estimated Construction Cost (E.C.C.)	=
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	=

LIFE EXPECTANCY

Conditions

- 1. Boilers
- 2. Electric Motors
- 3. Chillers
- 4. Controls
- 5. Cooling tower
- 6. Air handling units
- 7. Pumps
- 8. Generators
- 9. Transformers
- 10. Turbines
- 11. DHW Heaters
- 12. Elevator inoperative
- 13. Elevator cab damaged
- 14. Escalator inoperative
- 15. Escalator damaged
- 16. Dumbwaiter inoperative

Preservation Workbook facilityfacilityfacility	NT PLAN	FY 86
LIFE EXPECTANCY		
TYPICAL CONDITIONS		
Any condition which, if not addressed, will lead to further det costly repairs later than if corrected now.	erioration	and mo
1. Boilers		
What will happen in this case if work is not done?		
What will happen in this case if work is not done?		
Correction: Typical Methods and Install new boilers Suggested Unit Price	\$15/M	ВН
Correction: Typical Methods and Install new boilers	\$15/M	BH
Correction: Typical Methods and Install new boilers Suggested Unit Price	\$15/M	IBH
• Correction: Typical Methods and Install new boilers Suggested Unit Price Method proposed and locations:	\$15/M	IBH
Correction: Typical Methods and Install new boilers Suggested Unit Price	\$15/M	IBH
• Correction: Typical Methods and Install new boilers Suggested Unit Price Method proposed and locations: Total quantity	\$15/M	IBH

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =

Electric Motors What will happen in this case if work is not done?	
What will happen in this case if work is not done?	
	040/22
Correction: Typical Methods and Install new motors Suggested Unit Price	\$40/HP
Method proposed and locations:	_
	_
Total quantity x unit price Local or special conditions adding to unit cost:	
	_
Co	st =
Total Estimated Construction Cost (E.C.C	.) =
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.	33 =
Chillers	
What will happen in this case if work is not done?	
Correction: Typical Methods and Install new chiller	\$540/Top
Suggested Unit Price	\$340/1011
Method proposed and locations:	
Total quantity x unit price Local or special conditions adding to unit cost:	
	st =

preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT P	
Controls	
What will happen in this case if work is not done?	
Correction: Typical Methods and Install new controls Suggested Unit Price Method proposed and locations:	Unique
Total quantity x unit price	-
Local or special conditions adding to unit cost:	-
	=
Total Estimated Construction Cost (E.C.C.)	
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Cooling Tower	
Cooling Tower What will happen in this case if work is not done?	3 =
Cooling Tower What will happen in this case if work is not done?	3 =
Cooling Tower What will happen in this case if work is not done? Correction: Typical Methods and Install new tower	\$160/Ton
Cooling Tower What will happen in this case if work is not done? Correction: Typical Methods and Install new tower Suggested Unit Price	\$160/Ton
Cooling Tower What will happen in this case if work is not done? Correction: Typical Methods and Install new tower Suggested Unit Price Method proposed and locations:	\$160/Ton
Cooling Tower What will happen in this case if work is not done? Correction: Typical Methods and Install new tower Suggested Unit Price Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost:	\$160/Ton
Cooling Tower What will happen in this case if work is not done? Correction: Typical Methods and Install new tower Suggested Unit Price Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost:	\$160/Ton
Cooling Tower What will happen in this case if work is not done? Correction: Typical Methods and Install new tower Suggested Unit Price Method proposed and locations: Total quantity x unit price Local or special conditions adding to unit cost:	\$160/Ton

Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Pumps What will happen in this case if work is not done?		•	
Correction: Typical Methods and Install new air Suggested Unit Price handling unit Method proposed and locations: Total quantity	ng Units		
Suggested Unit Price handling unit Method proposed and locations: Total quantity x unit price = Local or special conditions adding to unit cost: Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Pumps What will happen in this case if work is not done? Correction: Typical Methods and Install new pump \$40/G Suggested Unit Price Method proposed and locations: Total quantity x unit price = Local or special conditions adding to unit cost:	happen in this case if work	is not done?	
Method proposed and locations: Total quantity x unit price = Local or special conditions adding to unit cost: Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Local Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =			SE EO/GEN
Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Pumps What will happen in this case if work is not done? Correction: Typical Methods and Install new pump \$40/\text{G}\$ Suggested Unit Price Method proposed and locations: Total quantity x unit price = Local or special conditions adding to unit cost:			<u> </u>
Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Pumps What will happen in this case if work is not done? Correction: Typical Methods and Install new pump \$40/\text{G}\$ Suggested Unit Price Method proposed and locations: Total quantity x unit price = Local or special conditions adding to unit cost:			
Total Estimated Construction Cost (E.C.C.) =	pecial conditions adding to	t price unit cost:	_
Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = Pumps What will happen in this case if work is not done? Correction: Typical Methods and Install new pump \$40./GI Suggested Unit Price Method proposed and locations: Total quantity x unit price = Local or special conditions adding to unit cost:		Cos	
Pumps What will happen in this case if work is not done? Correction: Typical Methods and Install new pump \$40/GI Suggested Unit Price Method proposed and locations: Total quantity x unit price = Local or special conditions adding to unit cost:			
What will happen in this case if work is not done? Correction: Typical Methods and Install new pump \$40/G Suggested Unit Price Method proposed and locations: Total quantity x unit price = Local or special conditions adding to unit cost:	ect Cost (including D.C.P.C	o. costs): E.C.C. x 1.3	3 =
Suggested Unit Price Method proposed and locations: Total quantity x unit price = Local or special conditions adding to unit cost:	happen in this case if work	is not done?	
Total quantity x unit price = Local or special conditions adding to unit cost:		stall new pump	
Local or special conditions adding to unit cost:	Suggested Unit Price		\$40/GPM
	Suggested Unit Price		\$40/GPM
Cost =	Suggested Unit Price posed and locations:	t price	\$40/GPM
	Suggested Unit Price posed and locations:	t price	\$40/GPM
Total Estimated Construction Cost (E.C.C.) =	Suggested Unit Price posed and locations:	t price	
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =	Suggested Unit Price posed and locations: tity x unit pecial conditions adding to	t price unit cost:	- =
	Suggested Unit Price posed and locations: tity x unit pecial conditions adding to	t price unit cost: Cos Cos Construction Cost (E.C.C.	t =

Gene:	rators	
What	will happen in this case if work is not done?	
Corre	ection: Typical Methods and Install new generator	\$450/KW
	Suggested Unit Price	
Me CIN	od proposed and locations:	
Tota	l quantity x unit price l or special conditions adding to unit cost:	
Loca	l or special conditions adding to unit cost:	
	·	
	Cost	=
	Cost	
	Total Estimated Construction Cost (E.C.C.) 1 Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 sformers	=
Trans	Total Estimated Construction Cost (E.C.C.) 1 Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	=
Trans	Total Estimated Construction Cost (E.C.C.) 1 Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 sformers will happen in this case if work is not done?	=
Trans What Corre	Total Estimated Construction Cost (E.C.C.) 1 Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 sformers will happen in this case if work is not done? ection: Typical Methods and Install new transformer Suggested Unit Price	=
What	Total Estimated Construction Cost (E.C.C.) 1 Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 sformers will happen in this case if work is not done? ection: Typical Methods and Install new transformer	=
What	Total Estimated Construction Cost (E.C.C.) 1 Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 sformers will happen in this case if work is not done? ection: Typical Methods and Install new transformer Suggested Unit Price	=
Trans What Corre Metho	Total Estimated Construction Cost (E.C.C.) 1 Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 sformers will happen in this case if work is not done? ection: Typical Methods and Install new transformer	=
Trans What Corre	Total Estimated Construction Cost (E.C.C.) 1 Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 sformers will happen in this case if work is not done? ection: Typical Methods and Install new transformer Suggested Unit Price	=
Trans What Corre Metho	Total Estimated Construction Cost (E.C.C.) 1 Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 sformers will happen in this case if work is not done? ection: Typical Methods and Install new transformer Suggested Unit Price od proposed and locations: 1 quantity x unit price 1 or special conditions adding to unit cost:	\$40/KVA
Trans What Corre Metho	Total Estimated Construction Cost (E.C.C.) 1 Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 sformers will happen in this case if work is not done? ection: Typical Methods and Install new transformer	\$40/KVA
Trans What Corre Metho	Total Estimated Construction Cost (E.C.C.) 1 Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Sformers will happen in this case if work is not done? ection: Typical Methods and Install new transformer Suggested Unit Price od proposed and locations: 1 quantity x unit price 1 or special conditions adding to unit cost: Cost	\$40/KVA
Trans What Corre Metho	Total Estimated Construction Cost (E.C.C.) 1 Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 Sformers will happen in this case if work is not done? ection: Typical Methods and Install new transformer Suggested Unit Price od proposed and locations: 1 quantity x unit price 1 or special conditions adding to unit cost: Cost Total Estimated Construction Cost (E.C.C.)	\$40/KVA

re:	servation Workbook facility facility	AN FY 86
10.	Turbines What will happen in this case if work is not done?	
	Correction: Typical Methods and Install new turbine Suggested Unit Price Method proposed and locations:	\$400/HP
	Total quantity x unit price Local or special conditions adding to unit cost:	
	Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	
L.	Domestic Hot Water Heaters What will happen in this case if work is not done?	
	Correction: Typical Methods and Install new heater Suggested Unit Price Method proposed and locations:	\$12/MBH
	Total quantity x unit price Local or special conditions adding to unit cost:	=
	Cost Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	-

Elevator inoperative		
What will happen in this case if w	work is not done?	
Correction: Typical Methods and Suggested Unit Price	•	\$5,000 mir
Method proposed and locations:	(hydraulic)	\$10,000
Fotal quantity x Local or special conditions adding	unit price	=
		-
•	red Construction Cost (E.C.C.)	
Total Project Cost (including D.C.	P.O. COSES): E.C.C. X 1.33	-
Elevator cab damaged		
Elevator cab damaged What will happen in this case if w	ork is not done?	
	ork is not done?	
What will happen in this case if we correction: Typical Methods and		
What will happen in this case if w	Repair panels or trim	\$2,000/Cab
What will happen in this case if worker will happen in this case if worker will be a second correction: Typical Methods and Suggested Unit Price	Repair panels or trim	\$2,000/Cab
What will happen in this case if we correction: Typical Methods and Suggested Unit Price Method proposed and locations:	Repair panels or trim	\$2,000/Cab
What will happen in this case if workers of the Correction: Typical Methods and Suggested Unit Price	Repair panels or trim	\$2,000/Cab
What will happen in this case if we correction: Typical Methods and Suggested Unit Price Method proposed and locations:	Repair panels or trim unit price to unit cost:	\$2,000/Cab
Correction: Typical Methods and Suggested Unit Price Method proposed and locations: Total quantity x Local or special conditions adding	Repair panels or trim	\$2,000/Cab

1	preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PI	LAN FY
	Escalator inoperative What will happen in this case if work is not done?	
	Correction: Typical Methods and Repair operating machinery Suggested Unit Price (\$5,000 min.) Replace Method proposed and locations:	\$15,000 \$35,000
	Total quantity x unit price Local or special conditions adding to unit cost:	
	Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	
	Escalator damaged What will happen in this case if work is not done?	
	Correction: Typical Methods and Repair (\$5,000) Suggested Unit Price Method proposed and locations:	\$15,000
	Total quantity x unit price Local or special conditions adding to unit cost:	=
	Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	-

Dumbwaiter inoperative			
What will happen in this case if wo	ork is not done?		
Correction: Typical Methods and Suggested Unit Price Method proposed and locations:			\$3,000 \$10,000
Total quantity x u Local or special conditions adding			=
Local of special conditions adding			
		Cost	=
Total Estimat	ed Construction	Cost (E.C.C.)	=
Total Project Cost (including D.C.P	.O. costs):	E.C.C. x 1.33	-
. (Other Conditions)			
	rk is not done?		
. (Other Conditions) What will happen in this case if wo	ork is not done?		
	ork is not done?	•	
What will happen in this case if wo	rk is not done?		
What will happen in this case if wo Correction:			
What will happen in this case if wo		•	
What will happen in this case if wo Correction:			
What will happen in this case if wo Correction:		•	
What will happen in this case if wo Correction: Method proposed and locations:	·		
What will happen in this case if wo Correction:	nit price		=
What will happen in this case if wo Correction: Method proposed and locations: Total quantity x u	nit price		=
What will happen in this case if wo Correction: Method proposed and locations: Total quantity x u	nit price		=
What will happen in this case if wo Correction: Method proposed and locations: Total quantity x u Local or special conditions adding	nit priceto unit cost:	Cost	=
Correction: Method proposed and locations: Total quantity x u Local or special conditions adding	nit priceto unit cost:	Cost (E.C.C.)	=

Pre	preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN	FY 86
	. (Other Conditions) What will happen in this case if work is not done?	
•	Correction: Method proposed and locations:	
	Total quantity x unit price =	
	Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =	
	. (Other Conditions) What will happen in this case if work is not done?	
_	Correction: Method proposed and locations:	
	Total quantity x unit price = Local or special conditions adding to unit cost:	
	Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =	

Pres	reparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86
(#)_	. (Other Conditions)
•	What will happen in this case if work is not done?
•	Correction: Method proposed and locations:
	Total quantity x unit price = Local or special conditions adding to unit cost:
	Cost =
	Total Estimated Construction Cost (E.C.C.) =
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =
(#)_	. (Other Conditions)
•	What will happen in this case if work is not done?
•	Correction: Method proposed and locations:
	Total quantity x unit price =
	Cost =
	Total Estimated Construction Cost (E.C.C.) =
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =

HABITABILITY

Conditions

- 1. Inadequate heating
- 2. Inadequate cooling
- 3. Inadequate operable plumbing fixtures
- 4. Inadequate lighting
- 5. Inadequate ventilation
- 6. Excessive noise
- 7. Presence of airborne asbestos
- 8. Presence of lead paint in spaces occupied by children under the age of six

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Preservation \	Workbook	facility	
for preparation of	LONG RANGE	CAPITAL FACILITIES DEVELOPMENT PLAN	FY 86

HABITABILITY

Any condition which, if not addressed, will cause loss of normal use of the facility because the environment required by law is not present. Habitability is affected by failure of such systems as heating, cooling, ventilation, plumbing and life safety.

TYPICAL CONDITIONS

Correction: Typical Methods and Install new heating	
Suggested Unit Price system	\$5.00/s
Method proposed and locations:	
	
Sotal quantityx unit price	2
Notal quantity x unit price Local or special conditions adding to unit cost:	
Cotal quantity x unit price Local or special conditions adding to unit cost:	
Total quantity x unit price x unit price cocal or special conditions adding to unit cost:	

Pre	preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT P	LAN FY 86
2.	<pre>Inadequate cooling What will happen in this case if work is not done?</pre>	
•	Correction: Typical Methods and Install new cooling system Suggested Unit Price Method proposed and locations:	\$10/s.f.
	Total quantity x unit price Local or special conditions adding to unit cost:	
	Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	
3. •	Inadequate operable plumbing fixtures What will happen in this case if work is not done?	
•	Correction: Typical Methods and Install new fixtures § Suggested Unit Price Method proposed and locations:	1,000/fixture
	Total quantity x unit price Local or special conditions adding to unit cost:	
	Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	

	servation Workbook facility facility facility	
4.	<pre>Inadequate lighting What will happen in this case if work is not done?</pre>	
•	Correction: Typical Methods and Install new lighting Suggested Unit Price Method proposed and locations:	\$100/fixture
	Total quantity x unit price Local or special conditions adding to unit cost: Cost	
	Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	=
5.	Inadequate ventilation What will happen in this case if work is not done?	
.•	Correction: Typical Methods and Install new ventilation Suggested Unit Price system Method proposed and locations:	\$2.25/CFM
	Total quantity x unit price Local or special conditions adding to unit cost:	
	Total Estimated Construction Cost (E.C.C.)	
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	=

Excessive noise	
What will happen in this case if work is not done?	
Correction: Typical Methods and Insulate and soundproof Suggested Unit Price Remove source of noise Install vibration	\$3.00/s Unique
eliminators Method proposed and locations:	\$20/HP
Total quantity x unit price Local or special conditions adding to unit cost:	
Local of Special Conditions adding to unit cost:	
	Cost =
Total Estimated Construction Cost (E.C. Total Project Cost (including D.C.P.O. costs): E.C.C. x	
Total Project Cost (including D.C.P.O. costs): E.C.C. x	
Total Project Cost (including D.C.P.O. costs): E.C.C. x Presence of loose asbestos	1.33 =
Total Project Cost (including D.C.P.O. costs): E.C.C. x Presence of loose asbestos What will happen in this case if work is not done?	1.33 =
Total Project Cost (including D.C.P.O. costs): E.C.C. x Presence of loose asbestos	1.33 =
Total Project Cost (including D.C.P.O. costs): E.C.C. x Presence of loose asbestos What will happen in this case if work is not done? Correction: Typical Methods and Remove ceiling or	1.33 =
Total Project Cost (including D.C.P.O. costs): E.C.C. x Presence of loose asbestos What will happen in this case if work is not done?	1.33 =
Total Project Cost (including D.C.P.O. costs): E.C.C. x Presence of loose asbestos What will happen in this case if work is not done? Correction: Typical Methods and Remove ceiling or Suggested Unit Price structural asbestos	\$6.00/s \$5.00/s
Total Project Cost (including D.C.P.O. costs): E.C.C. x Presence of loose asbestos What will happen in this case if work is not done? Correction: Typical Methods and Remove ceiling or Suggested Unit Price structural asbestos Remove asbestos pipe insulation	\$6.00/s \$5.00/s
Presence of loose asbestos What will happen in this case if work is not done? Correction: Typical Methods and Remove ceiling or Suggested Unit Price structural asbestos Remove asbestos pipe insulation Method proposed and locations:	\$6.00/s \$5.00/s
Presence of loose asbestos What will happen in this case if work is not done? Correction: Typical Methods and Remove ceiling or Suggested Unit Price structural asbestos Remove asbestos pipe insulation Method proposed and locations:	\$6.00/s \$5.00/s

facility.....

Preservation Workbook

Presence of lead paint in spaces occupied by children under What will happen in this case if work is not done? Correction: Typical Methods and Remove lead paint Suggested Unit Price	
Correction: Typical Methods and Remove lead paint	
Method proposed and locations:	
Total quantity x unit price Local or special conditions adding to unit cost:	
Local or special conditions adding to unit cost:	
	Cost =
Total Estimated Construction Cost (E.C	
Total Project Cost (including D.C.P.O. costs): E.C.C. x	1.33 =
. (Other Conditions)	
What will happen in this case if work is not done?	
Correction: Method proposed and locations:	
Total quantity x unit price	=
Local or special conditions adding to unit cost:	
	Cost =

Profor	eservation Workbook facility facility facility	FY 86
(#)	. (Other Conditions)	
•	What will happen in this case if work is not done?	
•	Correction: Method proposed and locations:	
	Total quantity x unit price = Local or special conditions adding to unit cost:	
	Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =	
	. (Other Conditions) What will happen in this case if work is not done?	
•	Correction: Method proposed and locations:	
	Total quantity x unit price = =	
	Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =	

Preservation Workbook facilityfor preparation of LONG RANGE CAPITAL FACILITIES DEV	/ELOPMENT PLAN	FY 86
(#) . (Other Conditions)		
What will happen in this case if work is not done?		
Correction: Method proposed and locations:		
Total quantity x unit price Local or special conditions adding to unit cost:	=	
Local or special conditions adding to unit cost:		
	Cost = _	
Total Estimated Construction Total Project Cost (including D.C.P.O. costs):		
	_	
#) (Other Conditions)	<u>.</u>	
What will happen in this case if work is not done?		•
	· · · · · · · · · · · · · · · · · · ·	
Correction:		
Method proposed and locations:		
Total quantity x unit price x unit price x unit cost:	-	
	Cost =	
Total Estimated Construction	Cost (E.C.C.) = _	
Total Project Cost (including D.C.P.O. costs):	E.C.C. x 1.33 =	

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OTHER HAZARDS

	servation Workbook facilityreparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLA	
(#)_	. (Cther Conditions)	·
	What will happen in this case if work is not done?	
•	Correction: Method proposed and locations:	
	Total quantity x unit price Local or special conditions adding to unit cost:	=
	Cost Total Estimated Construction Cost (E.C.C.) Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	
#) <u>-</u>	. (Other-Conditions) What will happen in this case if work is not done?	
	Correction: Method proposed and locations:	
	Total quantity x unit price Local or special conditions adding to unit cost:	=
	Cost	
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	

Prefor	eservation Workbook facility facility facility	LAN FY 86
(4)	(Other Conditions)	
(井)	. (Other Conditions)	
•	What will happen in this case if work is not done?	
•	Correction: Method proposed and locations:	
	Total quantity x unit price Local or special conditions adding to unit cost:	=
		=
	Total Estimated Construction Cost (E.C.C.)	
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	-
(#)_	. (Other Conditions)	
•	What will happen in this case if work is not done?	
•	Correction: Method proposed and locations:	
	Total quantity x unit price	=
	Local or special conditions adding to unit cost:	
		_
	Total Estimated Construction Cost (E.C.C.)	=
	Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	

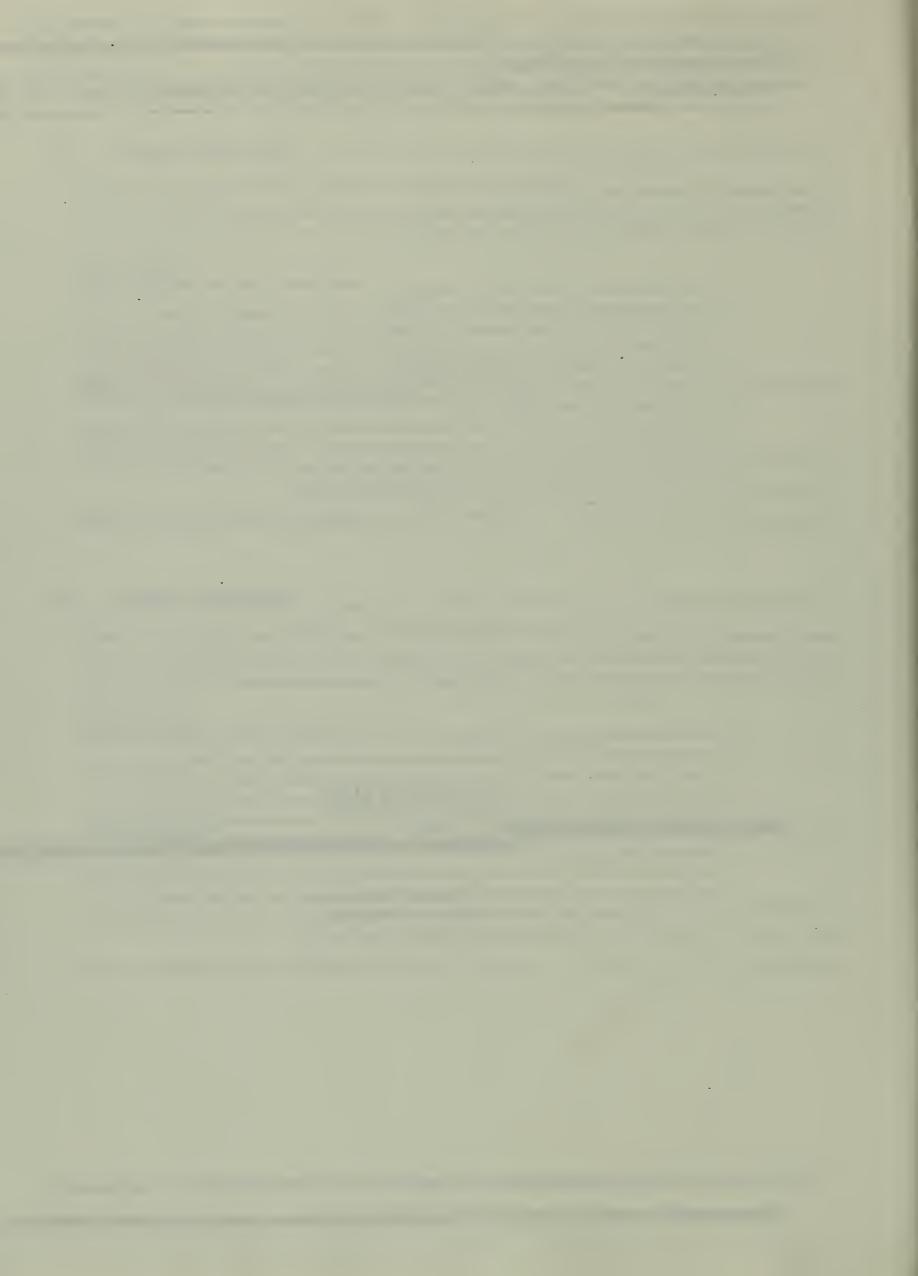
	servation Workbook facility facility
(#)	. (Other Conditions)
	What will happen in this case if work is not done?
•	Correction: Method proposed and locations:
	Total quantity x unit price = Local or special conditions adding to unit cost:
	Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =
(#) __	. (Other Conditions) What will happen in this case if work is not done?
•	Correction: Method proposed and locations:
	Total quantity x unit price = Local or special conditions adding to unit cost:
	Cost =
	Total Estimated Construction Cost (E.C.C.) = Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =

Pre	eservation Workbook preparation of LONG RANG	GE CAPITAL	facility	DEVELOPMENT	PLAN FY 86
(#)	. (Other Conditions)				
•	What will happen in this ca	ase if work	is not done?		
•	Correction: Method proposed and location	ons:			
	Total quantity Local or special conditions	x units adding to	price		- - -
				Cos	t =
	Total Project Cost (including			E.C.C. x 1.3	
(#)	. (Other Conditions)				
	What will happen in this ca	ase if work	is not done?	·	
•	Correction: Method proposed and location	ons:			
	Total quantity Local or special conditions	x units adding to	priceunit cost: _		
	Total	Fetimated	Construction) =
	Total Project Cost (including				

	vation Workbook facility facility	
(#)	(Other Conditions)	
Wha	at will happen in this case if work is not done?	
Met	rrection: thod proposed and locations:	
Tot	cal quantity x unit price cal or special conditions adding to unit cost:	-
_	Cost	=
	Total Estimated Construction Cost (E.C.C.)	
Tot	tal Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	
(#)	(Other Conditions)	
Wha	at will happen in this case if work is not done?	
	rrection: thod proposed and locations:	
Loc	cal quantity x unit price cal or special conditions adding to unit cost:	-
	Cost	=
	Total Estimated Construction Cost (E.C.C.)	=
Tot	cal Project Cost (including D.C.P.O. costs): E.C.C. x 1.33	=

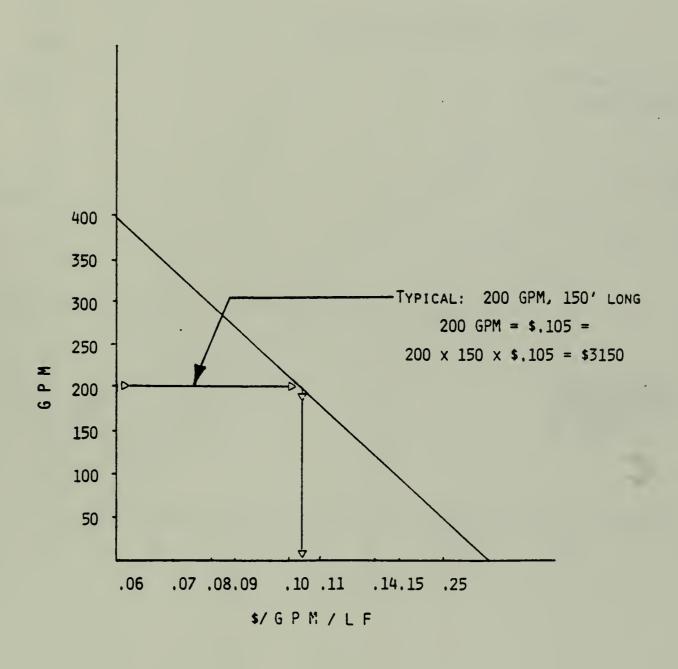
APPENDIX

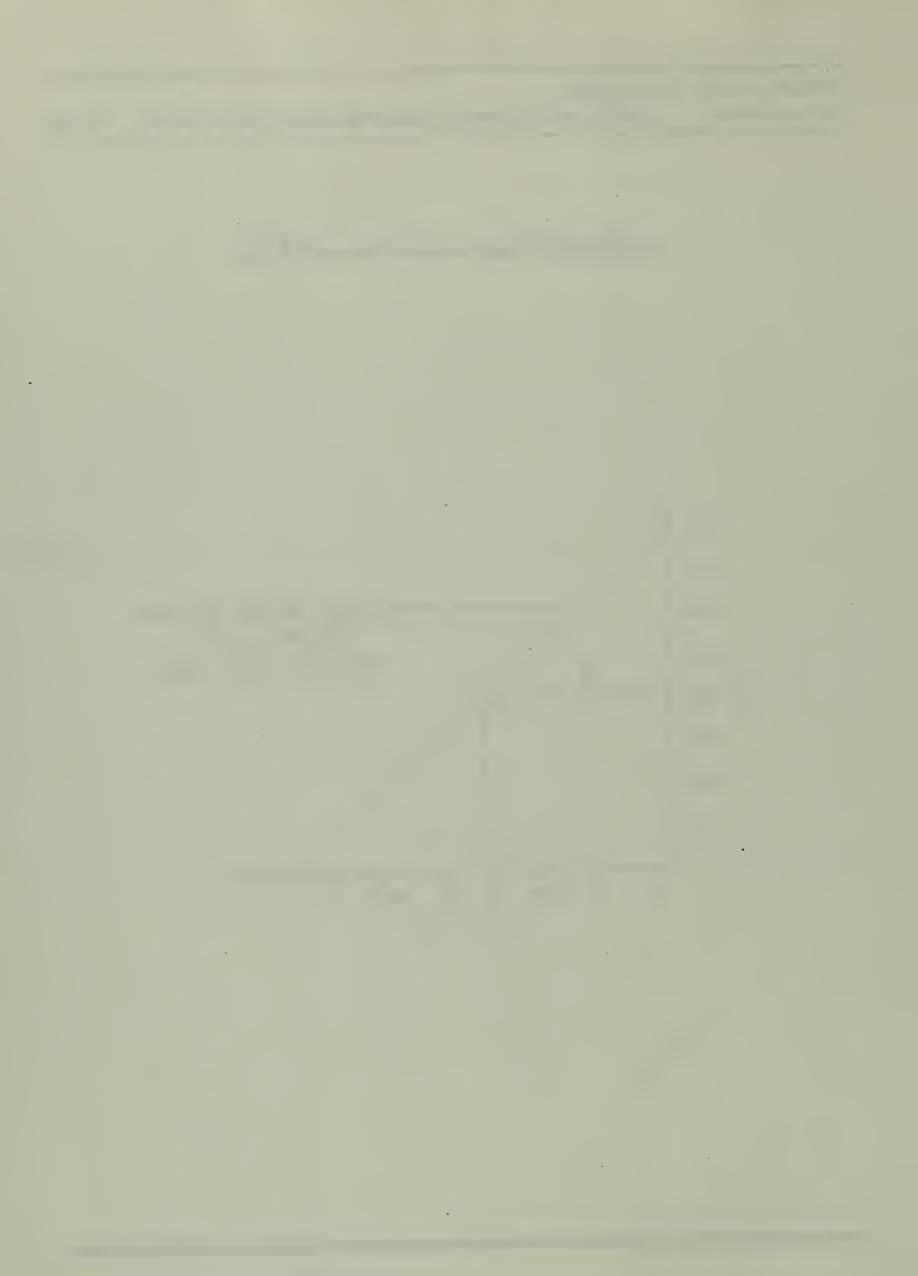
- 1. Piping Nomograph
- 2. Cable Nomograph



for preparation of

NOMOGRAPH: PIPING COSTS





for preparation of

